



**SHRI KHANDERAI PRATISHTHAN'S  
DNYANSAGAR INSTITUTE OF MANAGEMENT & RESEARCH**

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(AISHE Code : C - 41293, PUN Code - JMMP014030)



## Metric 3.3.1

**Number of Research Papers Published Per Teacher in  
the Journals Notified on UGC CARE List**

**2022-23**



  
**Director**  
Dnyansagar Institute of Management and  
Research  
Balewadi, Pune-411045





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(AISHE Code : C - 41293, PUN Code - IMMPO14030)



**Criterion III: - Research, Innovations and Extension  
Key Indicator: 3.3 Research Publications and Awards**

**3.3.1 Number of research papers published per teacher in the Journals notified on UGC CARE list during year 2022-23**

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							Link to website of the Journal	Link to article / paper / abstract of the article	Is it listed in UGC Care list
1	The Future Of Automotive Retail Customer Experience (CX) In India.	Dr. Sajid Alvi	MBA	M. P. Institute of Social Science Research, Ujjain	2022-23	0973-855X	<a href="https://mpissr.org/?page_id=1076">https://mpissr.org/?page_id=1076</a>	<a href="https://mpissr.org/?page_id=1076">https://mpissr.org/?page_id=1076</a>	UGC Care Listed
2	Analyzing Customer Responses to Factors Shaping Purchase Decisions in the Two-Wheeler Market: The Role of Information Sources and Promotional Tools	Dr.Sajid Alvi	MBA	International Journal of Advance and Innovative Research	2022-23	2394-7780	<a href="https://iaraedu.com/about-journal/index.php">https://iaraedu.com/about-journal/index.php</a>	<a href="https://iaraedu.com/about-journal/ijair-volume-10-issue-3-i-july-september-2023.php">https://iaraedu.com/about-journal/ijair-volume-10-issue-3-i-july-september-2023.php</a>	UGC Care Listed



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3	Deciphering Customer Purchase Priorities: Insights from Two-Wheeler Dealer Managers in Pune	Dr.Sajid Alvi	MBA	International Journal of Research in Management & Social Science	2022-23	2322 - 0899	<a href="https://www.empyreal.co.in/journal.html">https://www.empyreal.co.in/journal.html</a>	<a href="https://www.empyreal.co.in/volume11-issue-2-i-april-june-2023.html">https://www.empyreal.co.in/volume11-issue-2-i-april-june-2023.html</a>	
4	Elevating the Two-Wheeler Experience: Factors Shaping Purchase Choices and Post-Purchase Satisfaction	Dr.Sajid Alvi	MBA	Annals of the Bhandarkar Oriental Research Institute	2022-23	0378-1143	<a href="https://www.istor.org/journal/annbhaoriresins">https://www.istor.org/journal/annbhaoriresins</a>	<a href="https://www.istor.org/journal/annbhaoriresins">https://www.istor.org/journal/annbhaoriresins</a>	UGC Care Listed

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5	Unveiling the Key Factors Shaping Two-Wheeler Sales Process Design: Insights from Dealer Managers	Dr.Sajid Alvi	MBA	Journal of the Asiatic Society of Mumbai	2022-23	0972-0766	<a href="https://www.asiaticsociety.org.in/journal/index.php">https://www.asiaticsociety.org.in/journal/index.php</a>	<a href="https://www.asiaticsociety.org.in/journal/index.php/journal-new-series">https://www.asiaticsociety.org.in/journal/index.php/journal-new-series</a>	UGC Care Listed
6	Harmonizing Digital Horizons: Unveiling Customer Usage Patterns in Mobile Wallets	Dr.Sajid Alvi	MBA	Rabindra Bharati University Journal of Economics	2022-23	0975-802X	<a href="https://rbu.ac.in/home/page/112">https://rbu.ac.in/home/page/112</a>	<a href="https://rbu.ac.in/home/page/112">https://rbu.ac.in/home/page/112</a>	UGC Care Listed

  
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7	A Study of Factors that Influence the Quick Service Restaurants of Baner and Balewadi to OPT for Online Food Ordering Portals	Dr.Sajid Alvi	MBA	International Journal of Management Studies	2022-23	ISSN(Print) 2249-0302 ISSN (Online) 2231-2528	<a href="https://www.researchersworld.com/index.php/ijms/about">https://www.researchersworld.com/index.php/ijms/about</a>	<a href="https://www.researchersworld.com/index.php/ijms/article/view/2274/2117">https://www.researchersworld.com/index.php/ijms/article/view/2274/2117</a>	
8	A Study of Financial Performance Analysis: A Case of KSB Ltd.	Dr. Manisha Khaladkar	MBA	Annals of the Bhandarkar Oriental Research Institute	2022-23	0378-1143	<a href="https://www.jstor.org/journal/annbhaoriesins">https://www.jstor.org/journal/annbhaoriesins</a>	<a href="https://bori.ac.in/department/publication/department/">https://bori.ac.in/department/publication/department/</a>	UGC Care Listed

  
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							Link to website of the Journal	Link to article / paper / abstract of the article	Is it listed in UGC Care list
9	A study of non-interest income in private sector banks with special refers to ICICI bank	Dr. Manisha Khaladkar	MBA	International Journal of Applied Research	2022-23	2394-7500	<a href="https://www.allresearchjournal.com/archives/?year=2023&amp;vol=9&amp;issue=7&amp;part=B">https://www.allresearchjournal.com/archives/?year=2023&amp;vol=9&amp;issue=7&amp;part=B</a>	<a href="https://www.allresearchjournal.com/archives/2023/vol9issue7/PartB/9-7-50-622.pdf">https://www.allresearchjournal.com/archives/2023/vol9issue7/PartB/9-7-50-622.pdf</a>	

  
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							Link to website of the Journal	Link to article / paper / abstract of the article	Is it listed in UGC Care list
10	A Study on Long-Term Impact of Mergers and Acquisitions on Acquirers' Shareholders Systematic Risk with Reference to Healthcare Sector in India: A Comprehensive Analysis	Dr. Manisha Khaladkar	MBA	International Journal of All Research Education and Scientific Methods (IJARESM)	2022-23	2455-6211	<a href="http://www.ijaresm.com/a-study-on-long-term-impact-of-mergers-and-acquisitions-on-acquirers-shareholders-systematic-risk-with-reference-to-healthcare-sector-in-india-a-comprehensive-analysis">http://www.ijaresm.com/a-study-on-long-term-impact-of-mergers-and-acquisitions-on-acquirers-shareholders-systematic-risk-with-reference-to-healthcare-sector-in-india-a-comprehensive-analysis</a>	<a href="http://www.ijaresm.com/uploaded_files/document_file/Mr._Akhil_V_Shetty_(1)_8bZm.pdf">http://www.ijaresm.com/uploaded_files/document_file/Mr. Akhil V Shetty (1) 8bZm.pdf</a>	

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11	A Study on the Investors' Perception Related to M&A on Shareholders' Wealth and Profitability of Banks in India	Dr. Manisha Khaladkar	MBA	Orissa Journal of Commerce	2022-23	0974-8482	<a href="https://oicoca.org/issue1-23.html">https://oicoca.org/issue1-23.html</a>	<a href="https://oicoca.org/volume4_4_issue1/OJC_2023_44_1_6.pdf">https://oicoca.org/volume4_4_issue1/OJC_2023_44_1_6.pdf</a>	UGC Care Listed
12	Human Resource Recruitment And Selection In IT Sector	Dr. Manisha Khaladkar	MBA	Phalanx: A Quarterly Review for Continuing Debate	2022-23	2320-7698	<a href="https://www.phalanx.in/">https://www.phalanx.in/</a>	<a href="https://portal.issn.org/resource/ISSN/2320-7698">https://portal.issn.org/resource/ISSN/2320-7698</a>	UGC Care Listed

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13	A study of Consumer Purchase Pattern in Two Wheeler Automobile Industry	Dr. Manisha Jagtap	MBA	Shodhasamhita	2022-23	2277-7067	<a href="https://kksushodhasamhita.org/index.php/sdsa">https://kksushodhasamhita.org/index.php/sdsa</a>	<a href="https://kksushodhasamhita.org/index.php/sdsa">https://kksushodhasamhita.org/index.php/sdsa</a>	UGC Care Listed
14	Analyzing Customer Responses to Factors Shaping Purchase Decisions in the Two-Wheeler Market: The Role of Information Sources and Promotional Tools	Dr. Manisha Jagtap	MBA	International Journal of Advance and Innovative Research	2022-23	2394-7780	<a href="https://iaraedu.com/about-journal/index.php">https://iaraedu.com/about-journal/index.php</a>	<a href="https://iaraedu.com/pdf/ija-ir-volume-10-issue-3-i-july-september-2023.pdf">https://iaraedu.com/pdf/ija-ir-volume-10-issue-3-i-july-september-2023.pdf</a>	UGC Care Listed

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15	Deciphering Customer Purchase Priorities: Insights from Two-Wheeler Dealer Managers in Pune	Dr. Manisha Jagtap	MBA	International Journal of Research in Management & Social Science	2022-23	2322 - 0899	<a href="https://www.empyreal.co.in/downloads/ijrmss-volume11-issue-2-i-april-june-2023.pdf">https://www.empyreal.co.in/downloads/ijrmss-volume11-issue-2-i-april-june-2023.pdf</a>		
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18	Harmonizing Digital Horizons: Unveiling Customer Usage Patterns in Mobile Wallets	Dr. Manisha Jagtap	MBA	Rabindra Bharati University Journal of Economics	2022-23	0975-802X	<a href="https://rbu.ac.in/home/page/112">https://rbu.ac.in/home/page/112</a>	<a href="https://rbu.ac.in/home/page/112">https://rbu.ac.in/home/page/112</a>	UGC Care Listed

  
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20	A Study of Burnout Syndrome Amongst Hospital Staff During Covid Pandemic In Pune District	Dr. Asita Ghewari	MBA	The Online Journal of Distance Education and e-Learning	2022-23	2147-6454	<a href="https://tojdel.net/?pid=showissue&amp;issueid=274">https://tojdel.net/?pid=showissue&amp;issueid=274</a>	<a href="https://tojdel.net/journals/tojdel/articles/v11i01c02/v11i01-13.pdf">https://tojdel.net/journals/tojdel/articles/v11i01c02/v11i01-13.pdf</a>	UGC Care Listed

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21	Role of Self Efficacy in Relation To Perceived Organizational Support and Employee Engagement	Dr. Asita Ghewari	MBA	The Online Journal of Distance Education and e-Learning	2022-23	2147-6454	<a href="https://tojdel.net/?pid=showissue&amp;issueid=274">https://tojdel.net/?pid=showissue&amp;issueid=274</a>	<a href="https://tojdel.net/journals/tojdel/articles/v11i01c01/v11i01-45.pdf">https://tojdel.net/journals/tojdel/articles/v11i01c01/v11i01-45.pdf</a>	UGC Care Listed
22	Emerging Trends in Supply Chain Management and its Impact on Business Operations	Dr. Asita Ghewari	MBA	Empirical Economics Letters	2022-23	16818997	<a href="http://www.eel.my100megs.com/">http://www.eel.my100megs.com/</a>	<a href="https://zenodo.org/records/8432190">https://zenodo.org/records/8432190</a>	Scopus indexed

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23	A Study on Co-relationship between Corporate Social Responsibility and Organization Psychology	Dr. Asita Ghewari	MBA	NeuroQuantology	2022-23	1303 - 5150	<a href="https://www.neuroquantology.com/about.php">https://www.neuroquantology.com/about.php</a>	<a href="https://neuroquantology.com/open-access/A+Study+on+Co-relationship+between+Corporate+Social+Responsibility+and+Organization+Psychology+12108/">https://neuroquantology.com/open-access/A+Study+on+Co-relationship+between+Corporate+Social+Responsibility+and+Organization+Psychology+12108/</a>	UGC Care Listed

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24	A Study on Impact of Corporate Social Responsibility Activities on The Organization Effectiveness with Reference To Pharmaceutical Industry In India	Dr. Asita Ghewari	MBA	Journal of Pharmaceutical Negative Results	2022-23	2229-7723	<a href="https://www.pnrjournal.com/index.php/home/index">https://www.pnrjournal.com/index.php/home/index</a>	<a href="https://www.pnrjournal.com/index.php/home/article/view/8042/10727">https://www.pnrjournal.com/index.php/home/article/view/8042/10727</a>	UGC Care Listed



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							Link to website of the Journal	Link to article / paper / abstract of the article	Is it listed in UGC Care list
25	A Study of Compliance of Corporate Social Responsibility Implementation Practices with Respect to CSR Provisions as Stated in The Companies Act 2013 With Special Reference to Large-Scale Organizations In Pune	Dr. Asita Ghewari	MBA	The Online Journal of Distance Education and e-Learning	2022-23	2147-6454	<a href="https://tojdel.net/?pid=showissue&amp;issueid=274">https://tojdel.net/?pid=showissue&amp;issueid=274</a>	<a href="https://tojdel.net/journals/tojdel/articles/v10i04/v10i04-13.pdf">https://tojdel.net/journals/tojdel/articles/v10i04/v10i04-13.pdf</a>	UGC Care Listed

  
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							Link to website of the Journal	Link to article / paper / abstract of the article	Is it listed in UGC Care list
26	A study on Positioning Strategies and its Impact on Consumer Behaviour with Special reference to Nutritional Products Exclusively Meant for Women During Pregnancy	Dr. Asita Ghewari	MBA	International Journal of Food and Nutritional Sciences	2022-23	2320-7876	<a href="https://www.ijfans.org/about">https://www.ijfans.org/about</a>	<a href="https://www.ijfans.org/uploads/paper/0591c94d605f422c984dfffb0879a607f.pdf">https://www.ijfans.org/uploads/paper/0591c94d605f422c984dfffb0879a607f.pdf</a>	UGC Care Listed

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27	Resilience In Cyberspace With Data Analytics Fostered Knowledge Management Capabilities: A Discourse For Sustainable Implementation Strategy	Dr. Rachana. R. Shikhare	MBA	The Online Journal of Distance Education and e-Learning, January 2023	2022-23	2147-6454	<a href="#">The Online Journal of Distance Education and e-Learning</a>	<a href="https://www.tojdel.net/journals/tojdel/articles/v11i01c02/v11i01-55.pdf">https://www.tojdel.net/journals/tojdel/articles/v11i01c02/v11i01-55.pdf</a>	UGC Care Listed

  
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							Link to website of the Journal	Link to article / paper / abstract of the article	Is it listed in UGC Care list
28	A Literature Review of Cyber Security Adoptions In Automobile Sector: With Special Reference to connected Vehicles in Indian Context	Dr. Rachana. R. Shikhare	MBA	The Online Journal of Distance Education and e-Learning, April 2023	2022-23	2147-6454	<a href="https://www.tojdel.net/">https://www.tojdel.net/</a>	<a href="https://www.tojdel.net/journals/tojdel/articles/v11i02/v11i02-02.pdf">https://www.tojdel.net/journals/tojdel/articles/v11i02/v11i02-02.pdf</a>	UGC Care Listed
29	Application Of EKM In The Key Business Processes: A Survey Study In Selected IT Companies In Pune Region	Dr. Rachana. R. Shikhare	MBA	The Online Journal of Distance Education and e-Learning, January 2022	2022-23	2147-6454	<a href="https://www.tojdel.net/">https://www.tojdel.net/</a>	<a href="https://www.tojdel.net/journals/tojdel/articles/v11i01/c02/v11i01-31.pdf">https://www.tojdel.net/journals/tojdel/articles/v11i01/c02/v11i01-31.pdf</a>	UGC Care Listed

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30	Impact of work life balance on job switching behavior- an Empirical Study	Dr. Rachana Shikhare	MBA	The Electrochemical Society (ECS) Journal of Solid State Science and	2022-23	ISSN: 1938-5862; E-ISSN:1938-6737	<a href="https://iopscience.iop.org/journal/1945-7111/page/about">https://iopscience.iop.org/journal/1945-7111/page/about</a>	<a href="#">Impact of Work Life Balance (WLB) on Job Switching Behavior: An Empirical</a>	Scopus indexed

  
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							Link to website of the Journal	Link to article / paper / abstract of the article	Is it listed in UGC Care list
31	Transforming Human Resource Management with HR Analytics : A Quantitative Study of Benefits and Challenges	Dr. Rachana Shikhare	MBA	International Journal of Early Childhood Special Education (INT-JECSE) - Q4	2022-23	1308-5581	<a href="https://www.int-jecse.net/article/Transforming+Human+Resource+Management+with+HR+Analytics%253A+A+Quantitative+Study+of+Benefits+and+Challenges+2565/#copyright-container">https://www.int-jecse.net/article/Transforming+Human+Resource+Management+with+HR+Analytics%253A+A+Quantitative+Study+of+Benefits+and+Challenges+2565/#copyright-container</a>	<a href="https://www.int-jecse.net/article/Transforming+Human+Resource+Management+with+HR+Analytics%253A+A+Quantitative+Study+of+Benefits+and+Challenges+2565/#copyright-container">https://www.int-jecse.net/article/Transforming+Human+Resource+Management+with+HR+Analytics%253A+A+Quantitative+Study+of+Benefits+and+Challenges+2565/#copyright-container</a>	

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32	Factors Affecting the Effectiveness of HRIS (Human Resource Information System) :- An Empirical Study	Dr. Rachana Shikhare	MBA	Journal of Positive School Psychology	2022-23	ISSN : 2717-7564	<a href="http://journalppw.com">http://journalppw.com</a>	<a href="https://www.researchgate.net/publication/361865418_Factors_Affecting_the_Effectiveness_of_HRIS_Human_Resource_Information_System_-_An_Empirical_Study">https://www.researchgate.net/publication/361865418_Factors_Affecting_the_Effectiveness_of_HRIS_Human_Resource_Information_System_-_An_Empirical_Study</a>	Scopus indexed



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33	Human Resource Recruitment And Selection In IT Sector	Dr. Swati Singh	MBA	Phalanx: A Quarterly Review for Continuing Debate	2022-23	2320-7698	<a href="https://www.phalanx.in/">https://www.phalanx.in/</a>	<a href="https://portal.issn.org/resource/ISSN/2320-7698">https://portal.issn.org/resource/ISSN/2320-7698</a>	UGC Care Listed
34	Effectiveness of YouTube Advertisement in Purchase Decision	Shamli A Joshi	MBA	International Journal of Applied Research	2022-23	2394-7500	<a href="https://www.allresearchjournal.com/">https://www.allresearchjournal.com/</a>	<a href="https://www.allresearchjournal.com/archives/2023/vol9issue6/PartF">https://www.allresearchjournal.com/archives/2023/vol9issue6/PartF</a>	

  
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							Link to website of the Journal	Link to article / paper / abstract of the article	Is it listed in UGC Care list
35	A Comparative Study of CSR Initiatives in Private Sector Banks	Prof. Nilam Naidu	MBA	International Research Journal of Human Resource and Social Sciences	2022-23	ISSN(O): (2349-4085)	<a href="https://aarf.asia/pages/irjhrss.php">https://aarf.asia/pages/irjhrss.php</a>	<a href="https://aarf.asia/current/2023/Jun/7s5d7YrIAA1765e.pdf">https://aarf.asia/current/2023/Jun/7s5d7YrIAA1765e.pdf</a>	
36	A Study of Financial Performance Analysis: A Case of KSB Ltd.	Prof. Nilam Naidu	MBA	Annals of the Bhandarkar Oriental Research Institute	2022-23	ISSN: 0378-1143	<a href="https://bori.ac.in/departments/publication-department/">https://bori.ac.in/departments/publication-department/</a>	<a href="https://bori.ac.in/departments/publication-department/">https://bori.ac.in/departments/publication-department/</a>	UGC Care Listed

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37	Effectiveness of YouTube Advertisement in Purchase Decision	Bhagyashree A Joshi	MBA	International Journal of Applied Research	2022-23	2394-7500	<a href="https://www.allresearchjournal.com/">https://www.allresearchjournal.com/</a>	<a href="https://www.allresearchjournal.com/archives/2023/vol9issue6/PartE">https://www.allresearchjournal.com/archives/2023/vol9issue6/PartE</a>	
38	Digitalization of Banking Industry in India: Review of Literature	Prof. Ujval More	MBA	Journal of Indian School of Political Economy (Print Only)	2022-23	0971-0396	<a href="https://ugccare.unipune.ac.in/Apps1/User/WebA/ViewDetails?JournalId=101010793&amp;flag=Search">https://ugccare.unipune.ac.in/Apps1/User/WebA/ViewDetails?JournalId=101010793&amp;flag=Search</a>	Print Journal	UGC Care Listed

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							Link to website of the Journal	Link to article / paper / abstract of the article	Is it listed in UGC Care list
39	Measuring Financial Performance Of NSE Listed Selected Fertilizer Companies In India Based On Altman's Z Score	Nilambari Moholkar	MBA	The Online Journal of Distance Education and e-Learning	2022-23	2147-6454	<a href="https://tojdel.net/?pid=showissu&amp;issueid=274">https://tojdel.net/?pid=showissu&amp;issueid=274</a>	<a href="https://tojdel.net/journals/tojdel/articles/v11i01c01/v11i01-38.pdf">https://tojdel.net/journals/tojdel/articles/v11i01c01/v11i01-38.pdf</a>	UGC Care Listed

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## THE FUTURE OF AUTOMOTIVE RETAIL CUSTOMER EXPERIENCE (CX) IN INDIA.

**Mr. Ajay Mohod**

Research Scholar, Lotus Business School, Pune  
Savitribai Phule Pune University, Pune

**Dr. Sajid Alvi**

Director,  
Dnyansagar Institute of Management & Research, Pune

### Abstract:

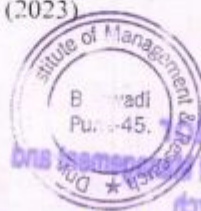
The automotive retail Industry constitutes the dealers who enable the pre-sales, sales and service functions for Automakers. The automotive retail customer experience (CX) is related to the perception and feeling a customer gets while interacting with the auto brands and dealers in their car-buying journey across all channels, be it dealership stores (physical) or online. The automotive customer experience encompasses the entire car-buying journey of the customer. Every touchpoint customer has in his car-buying journey gives him the experience of buying the car. The customer experience may be positive or negative based on their interpretation of brand and dealer interactions.

Gone are the days when Automotive companies were differentiating themselves from their competitors merely based on the product, where it was all about the product mindset, and customer focus was comparatively lesser. Switch to the last decade; every Automaker has world-class products with similar quality, features, pricing and after-sales support. So, the product itself does not remain a key differentiator. Customers experience a seamless online shopping experience when they shop online for their Fashion, Grocery, Pharmacy, Travel and Health needs, even book Cabs, Order Food, and Purchase Auto or Health Insurance online without visiting physical stores. They expect a similar online experience from the Automakers wherein "Convenience" plays a vital role in their car-buying journey. Therefore, Automakers and Dealers must understand their existing and prospective customers' needs/demands and changing expectations to create a seamless online and offline car buying experience that should match with other online shopping experiences customers receive. The core purpose of this research paper is to explain the automotive customer experience, how it differs from customer service and the Future of automotive retail customer experience in India.

**Keywords** – Customer Experience (CX), Customer Service (CS), Auto OEM (Automotive Original Equipment Manufacturer), Omni Channel (an amalgamation of Online and Offline channels which provides consistent experience).

### 1. Introduction

(timesofindia, 2023) (Nikkei Asia, 2023) The Indian automobile industry has become the world 3<sup>rd</sup> largest vehicle market in 2022, surpassing Japan based on the sales volume data consolidated by the Society of Indian Automotive Manufacturers (SIAM) (Business-Standard, 2023). In 2022, India sold 4.25 million units of new vehicles as compared to 4.2 million units in Japan. As a point of reference, China sold 26.75 million new cars in 2022, becoming the world's largest auto market, followed by US, India and Japan. The market size of Indian Passenger Vehicle was valued



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at US\$ 32.70 billion in 2021 and is expected to reach a value of US\$ 54.84 billion by 2027 (IBEF, 2022)

The Indian Automotive industry is one of the key driving factors for the Indian economy to thrive. As of 2022, the Indian auto industry contributes almost 6.4% of India's GDP (IBEF, 2022) and employs close to 32 million people through direct and indirect employment. The Indian automotive Industry (including component manufacturing) is expected to reach US\$ 251 - 282 billion by 2026.

### **Customer Experience is disrupting Automotive Retail in India-**

Indian Consumer's car-buying behaviour is going through a paradigm shift where their expectations from Automakers are shaping up based on their experiences on Amazon or Flipkart or Zomato, MakeMyTrip and other online experiences. Social media influence their purchase decisions, and they are inclined toward buying or at least configuring the cars online on the devices of their choice from anywhere. The boundaries between online and offline channels are blurring; consumers expect to start their car buying journey online on any device and end it online or offline with the frictionless transition between channels. Automakers must understand these changing consumer behaviour and expectations which is more digitally focussed on providing compelling, par customer experience with other industries.

### **2. Automotive Industry Trends**

**According to Google's Auto Gear Shift India 2020 Report, it states that-**

1. 54% of prospective car buyers are willing to buy cars online, given an option.
2. 53% of car buyers already use the Car Configurator option on the Auto OEM's online channel to configure their cars for colour, rims & trims, and accessories.
3. 95% of new car sales in India are digitally influenced, meaning customers first research their cars on social media platforms, YouTube videos, and Aggregator apps like Carwale.
4. 80% of car buyers watch YouTube videos where they get to know complete car reviews and expert opinions.

**Deloitte's "2022 Global Automotive Consumer Study" reports the factors for considering online car buying in India are-**

1. 32% say "Convenience" of buying cars online.
2. 27% say "Ease of Use" in online car buying.

### **3. Literature Review**

The existing literature was reviewed concerning the Automotive Industry, Auto Retail, and Customer Experience across all sales channels was studied to find out what body of research has been done so far in the last few years and identified a few gaps.

(Karthik Vasudevan, Elevating human experience for automotive customers through digital transformation, 2020) Study the human experience of Automotive Consumers through digital technologies. Forty-seven percent of Customers in India are willing to buy a Car online compared to 23% in the US, 6% in Japan and 49% in China. More than 60% of customers believe digital touchpoints merely meet expectations. A paradigm shift in Customer Journey during and Post Covid uses the advancement in digital technologies. Focused on AI aspects of Digital Technology's impact on Customer Experience on Online channels, it should also have discussed Digital tech impact in offline/physical retail outlets. The detailed use cases of leveraging innovative digital technologies needed to be elaborated, e.g., Digital Kiosks, Chatbots, AI-based product manuals, Digital Sales consultants, AR/VR, and Online Retail.



(Arun Koyadan Koroth, 2018) The paper explores the paradigm shift occurring in the automotive retailing Industry since the advent of technological innovations and different solutions in mobility. The impacts include the falling need and demand for personal cars, the rise of extensive fleet services like car subscriptions or lower maintenance needs that are expected to reduce the importance of dealerships drastically. The research should have covered the customer experience part using Online and Offline touchpoints. The research paper talks about the ownership models like subscriptions and the emergence of electric and autonomous vehicles.

(Kinski, Google Trends as Complementary Tool for New Car Sales Forecasting: A Cross-Country Comparison along the Customer Journey, 2016) Studies the Google Trends tool for new car sales prediction. Auto OEMs and Dealers can use this for forecasting the near-accurate inventory at the dealerships. This paper only covers the time lag between the car buying process from online research to actual buying using the digital tool Google Trends. It does not talk about digital technologies that impact the customer experience online and offline, which drives their car buying decision.

(Tabavar, Study of marketing segmentation in automobile industries in India \_with special reference to Pune . 2012) This study explores the market segmentation parameter in the Indian automobile industry. This critical marketing tool can be introduced in the automotive market to create a greater demand for products, gain a competitive advantage and increase levels of customer satisfaction. This study has chosen—Pune city. The research did not discuss digital technologies or describe the customer experience across different interaction channels. It covers the process at the dealerships.

(Phule, 2012) This research paper discusses consumer behavior and segments however need to specify the strategies dealers and Auto OEMs should devise to enhance the CX in the Omni Channel environment.

(Sharma, 2016) Automobile companies should make online dealing as easy and secure as a face-to-face deal so that customers feel more comfortable while dealing online with the company. The research paper should have touched upon the CX part and digital tech apart from CRM. Even in CRM, it should have discussed various tools available in the Market like Salesforce, SAP CRM, and Sugar CRM.

(Voice of Customer – Understanding vehicle purchase preferences during and post COVID-19, 2020) The research paper delves into choices on vehicle purchase Pre and Post COVID-19 and the rationale behind the change in priorities. Gauge customer expectations, future intent and consideration to determine the factors driving purchase decision-making. Up to 60% of gen Z are open to purchasing vehicles online. On-demand mobility is a long-term trend in India. Vehicle subscription in 2020 is expected to be 3-3. Five times vs. Pre-covid19. Up to 30% of the respondents under 35 years are willing to consider vehicle subscription services as an option for vehicle acquisition. The research paper did not focus on car buying channel preference—no details on digital technology usage at Dealerships.

(The new Automotive Dealer: Designed for Me, 2018) Dealerships will remain the lynchpin of the automotive distribution chain and customer interaction—but not in their current form. The automotive dealerships of the Future will be connected mobility hubs that engage, entertain and delight customers, and now is the time to start creating them. As consumers engage with a brand, they compare their experiences with the best offerings across all industries. The research paper depicts the customer journey by blending the Digital with the physical. Explains in detail what Dealers should be doing to enhance the CX Omni Channel way.





(Kristina Bonitz, 2021) The global Covid-19 pandemic is making Auto OEMs spend more on Digital Transformation and invest in enabling class-apart experiences for their customers. The car configurator is at the heart of the online car buying process at OEM's online channel, which needs to live up to customers' expectations of the online car buying process. Customers need a more personalized, not with too many options, straightforward, seamless car buying experience online. Hence OEMs need to revolutionize the Car Configurator, focusing more on customer needs rather than making it more complex.

(Schmidt, Trenka, Franzén, Franzén, & Holtgrave, 2019) The paper enlists the facts of the Future of automotive sales, indicating that it will be Direct Sales wherein Auto OEMs will directly sell vehicles to their customers. However, dealers will still play the role of Franchisee Partners, representing the Brand locally and facilitating the customer car buying process in offline channels. It also emphasises that customer demands are evolving based on their experience with Online Retailers like Amazon and Flipkart. They expect price transparency, quick delivery of vehicles, and offers. Auto OEMs are doing pilots for the Dealer model with specific models or geographies to assess the market readiness, Dealer's role. The Dealer model will estimate to reduce the cost of Retail by 4%, generating more than \$1 billion in annual savings.

(Sachin Chadha, 2021) The car buying journey has shifted its focus from traditional to online. It does not mean physical channels will vanish. Instead, their role will change to enablers of car sales wherein Dealers would become experienced Centres and Car Delivery Service Centres. Enabling seamless CX is still at its nascent stage. The onus will be on Automakers to ensure their Dealer partners are well-equipped with digital technologies; staff gets trained to provide superior CX. Millennial expectations from Automakers are evolving based on the experience they get from Online Retailers.

#### 4. Objectives of the research paper

1. To understand the Customer Experience within the context of Automotive Retail.
2. To find out the difference between Customer Experience and Customer Service.
3. To understand why Customer Experience is crucial for Automakers in India.

#### 5. Justification of Research

Automakers in India have realised the potential of digital transformation in their Industry. The COVID-19 pandemic has further strengthened the importance of digital transformation. As a result, automakers have developed strategies to adopt digital technologies in their sales, service and marketing roles. Customer Experience has been the critical differentiator for Automakers across the globe. Hence, they are enhancing their customer experience across all interaction channels for sales, service and marketing.

There is a strong need to research and analyse the As-Is state of Customer Experience strategies enabled by Automakers in India, understand the gaps in their strategy and recommend potential digital solutions that would enhance their Customer Experience, which in turn drives increased sales and loyal customers. This research paper explains the Customer Experience in an Automotive Retail context and how it differs from Customer Service with examples related to the Auto industry. It further delves into the strategic importance of enabling enhanced seamless Customer Experience by Automakers in India and the Future Trends in the Automotive Retail industry.



### Challenges faced by Indian Automakers

- The Indian and Global automakers in the Indian market were all products driven a few years back. As a result, they were more focused on the products rather than Consumer-centric.
- Automakers and dealers still have different views of customers; there is no uniform customer 360 views available to automakers and dealers.
- The Automakers and their dealers operate in silos, e.g. The Customer Experience strategies which Automakers would like to implement at Dealers are not exercised that seriously, e.g. Some of the Automakers in India have digitalised the Lead capturing process when customers walk in. However, dealers still rely on the traditional manual approach to keying leads into their CRM system.
- Thirty-four per cent of India's population are millennials. They are tech-savvy, in their late thirties, and have greater purchasing power than before. As a result, their shopping habits are changing. Even for high-priced electronics items like TVs, Refrigerators, and Washing machines, they prefer buying online due to convenience and trust in e-commerce brands. Similarly, given an option, they also want to buy their next car online with minimal interaction with dealers. Therefore, automakers and dealers must address this rapidly changing consumer behaviour and expectations more efficiently, resulting in revenue loss and loyalty.

### 6. What is Customer Experience (CX) and Customer Service (CS) in Automotive Retail?

#### What is Customer Experience (CX)

Automotive Retail CX is about the perception and feeling customers experience in their car buying journey when they interact with the Automakers/Brands and Dealers across all interaction channels like Dealerships, web site, social media, contact centres, Email, and ChatBots. From a consumer standpoint, CX is about their expectations from the Automakers and Dealers to have a positive, seamless car buying experience. Customer Experience considers the broader customer journey across the organisation. It includes every interaction between the customer and the business, e.g., the car buying journey starts right from the need discovery, market research, online video reviews, shortlisting Auto brands, vehicle and their variants based on the need and budget, selecting the Dealer, booking test drive, negotiating the price, purchasing insurance, and finance, and finally getting the car delivered. CX captures how the customer uses product or service, their interactions with self-service support options, the feeling of walking into dealership outlets, customer service interactions with the sales team and more. (Blackstock, 2018)

When Automakers understand their customers' expectations and act on them, that builds the CX strategy. The customer expectations could be like

1. Able to browse through the cars catalogue on Automaker's website.
2. Able to configure the car by selecting the Engine, Transmission, Colour, Alloy Wheels, Seats, and Accessories and get the final on-the-road price of the vehicle.
3. Able to start the car buying journey on any channel, any device and finish on any other channel or another device.
4. Able to Book the Car online on the website or a mobile app.





5. Enable a video consultation call with the Sales professional at the Dealership rather than visiting in person.
6. Check and purchase car finance online.
7. Trade-In cars online and get the price quickly.
8. The Dealer should provide complete transparency in the car buying process.
9. The Dealer should respect customers and provide all updates regarding their car delivery proactively.

The above-stated customer expectations are not a complete list of customer expectations; however, it gives a glimpse of what customers think and expect from their Automakers. So, it all depends on the Automakers' ability to listen to their customers and act on their expectations. Customer expectations form the basis of the Customer Experience strategy of Automakers to consider how customers want to buy their cars and what essential deciding factors are like customer experience, use of digital technologies, need budget and usage.

### What is Customer Service?

When customer has issues with the products or services of the Brand they use, they reach out to the Brand's contact centre via phone, email, or social media. The agent then responds to the customer's queries and complaints, forming a Customer Service basis. Customer Service is when a customer initiates the dialogue with the Brand concerning their query or complaint, concern, requests, or any information they need from the Brand. Customer service agents respond to customer communication. Customer Service is about comforting customers and letting them know their concerns will be resolved. Agent mostly uses phrases like this during the conversation with the Customer, e.g. "Sorry to hear about the issue", "Thank you for keeping on hold", "Apologies for the kind of service experience", and "Sorry for the delay in shipment".

Customer service is probably a more colloquial term, which is the narrowest of both. ("What comes first, Customer Service or Customer Experience? ") It is the support and advice provided to a client for the Brand's product or service as required. It is the human touchpoint in the customer purchase journey of the Brand's product or service.

Customer Service is integral to Customer Experience as a whole. Customer service may form the basis of customer perception of the Brand, be it positive or negative, and that is what is entitled to Customer Service. However, Customer Service is limited to customer interaction when seeking advice or assistance with a product or service.

### 7. Examples of Automotive Customer Experience Vs. Automotive Customer Service-

"Customer Service" is always about being reactive to customer complaints, which means the customer initiates the dialogue with the Brand. Then only the customer service team gets involved in resolving the customer issue/complaint.

Another difference between customer experience and customer service is that customer experience encompasses the entire customer journey, including customer service.

Customer Service focuses on human interactions and directly supporting customers. The customer experience is the sum of the overall customer journey with the Brand. (Gauss, 2021)

Customer Service is limited to interacting with the customer when seeking guidance or assistance with a product or service.

Below are the use cases on Customer Service and Customer Experience, which clarifies the difference between them on a broader level-



Use Case #	Automotive Customer Experience	Automotive Customer Service
1	The Automaker's website is mobile friendly, enabling customers to configure the cars, book test drives, chat with chatbots, book the cars online, track the vehicle delivery, and book service appointments. Automakers enable their website with all digital tools, which would help prospective customers in their car-buying journey without any physical intervention from the Dealer side.	On the Automaker's website, customers can <ol style="list-style-type: none"> <li>1. Place a request for Test Drives</li> <li>2. Chat with Agent/Chat Bot</li> <li>3. Request for a Quote.</li> <li>4. Book a service appointment.</li> <li>5. Ask for vehicle pick up and drop off.</li> <li>6. Enquire about Accessories</li> <li>7. Claim Warranty</li> <li>8. Insurance Claim</li> <li>9. Enquire about Vehicle Delivery</li> </ol>
2	Dealerships proactively call customers based on their visits to Dealerships or Websites to enquire about their vehicle interest, arrange test drives, and provide additional information.	Dealership to <ol style="list-style-type: none"> <li>1. Schedule Test Drives based on the customer's requests.</li> <li>2. Schedule vehicle pickup and drop.</li> <li>3. Provide Vehicle feature demos online and at dealerships.</li> </ol>
3	Dealership sales personnel greet customers personally when they visit dealerships and make them feel special by providing hospitality and paying attention to their needs.	Ask customers to fill in the Enquiry Form. Based on the Enquiry Form, provide the required details.

The above-stated examples of Customer Experience (CX) and Customer Service are not exhaustive but provide a fair understanding of the differences between Customer Experience and Customer Service.

8. Why CX is disrupting the Automotive Industry in particular-

Every Automaker in India has a similar vehicle line in which they compete, e.g., Hyundai has Creta, Venue, and Tucson SUVs line up. In contrast, to counter that line-up, Mahindra has XUV700, XUV300, and Scorpio, and Tata Motors have Safari, Harrier, and Punch.; on top of it, Tata has lined up of e-Vehicles (EV) too. So, other Automakers are now already in the process of launching their EVs. If one compares the features, engine, and tech these cars have, then most of these cars have similar Tech, Features and Engines too. Hence, competing based on products/cars will not be a viable option for Automakers in the long run, and this is where CX plays a vital role as a differentiating factor.

To explain the importance of being customer-centric, let us take the example of a prospective customer who would like to buy a car from a specific Auto brand, and there are two Dealers, X and Y, of that Auto Brand in a city. Dealer X is closer to the customer's home, and Dealer Y is far away. The sales consultant at X dealer, where a customer walks in first due to proximity, does not greet him well, makes him wait for long, no hospitality is given, and the test drive vehicle was not





made available promptly. All these negative experiences make customers angry and disappointed and may think of switching the Brand itself.

The same customer then walks into dealer Y; right from his entry to the Dealership, he feels a sense of respect as sales person greets the customer first, enquires about Tea/Coffee, kindly requests them to wait in the customer lounge, informs them they can spend time at their digital kiosks to virtually experience the car, understand customer needs, makes sure the test drive vehicle is promptly available or gets the home test drive arranged so that customer does not need to visit again in person.

The customer finally booked the car at dealer Y even though it was far from his home just because the Dealer made him feel respected and unique, answered all his queries promptly, and provided a test drive at his house a couple of times. Of course, all this comes at a higher price than dealer X, but the customer is still willing to pay some more just because of the positive experience and how he is being treated respectfully. The same customer will then talk about his positive experience at the Y dealership on social media with friends and colleagues, keeping his loyalty and encouraging new customers to buy from that dealer Y.

So, what did Dealer Y do differently? He sold the same car to the customer. Dealer Y ensured customers' needs were met. The sales force at the Dealership is empathetic and welcoming, is available online, leverages digital tech while interacting with customers, is willing to go the extra mile to help the customers, treats them well, with respect and is there to clarify customers' never-ending queries and delight them with hospitality. On the other hand, dealer X was lost entirely on the customer experience front; his sales force was not empathetic, did not respect the customer and his needs, and no proper query resolution was being made, resulting in a negative customer experience.

Although this use case is hypothetical but can still relate to real customer experiences, in India, buying a car is still a prestige as it is looked at as a luxury item, all the family is involved in the car-buying journey, and everyone's opinion, and comfort is taken into consideration while selecting any car. Hence, it becomes the Automaker's and dealers' responsibility to ensure their prospective customers are well treated across their channels; their sales staff is trained to be empathetic, knowledgeable and well-behaved with the customers.

#### 9. Future of Automotive Retail

With the advent of digital technologies, Automakers and dealers need to leverage digital technologies to enhance their customer experience while they interact with them through online and offline channels. (Vehicle Buying 2.0, 2021) Following are the future trends in the Automotive Retail industry.

##### 1. Direct 2 Consumer(D2C) or Agency Business Model

This D2C business model will be a disruptor in the Automotive Industry. It challenges the existence of Dealers and their role in enabling the sale. Mercedes Benz in India has already adopted this Agency model, which they call "Retail of The Future", wherein the role of their dealers has transformed to experience enablers and do consultative selling rather than a target-based, inventory-prone model. In the Agency model, the Brand owns and manages the inventory and transparent pricing on its online platforms.

This model will benefit all the stakeholders involved in it. The first stakeholder, the Automakers, would gain their customer insights first-hand, which was not the case in the traditional dealer model; they will get control over stock, pricing and CX strategies and execution. The second stakeholder, dealers, whose role would transform to experience



enablers, their sales associates would be brand advocates wherein they will converse with customers like auto enthusiasts who know the product in and out; they will still be relevant as customers still want a physical presence for doing test drives, taking delivery of their new vehicles, insurance and service. However, dealers will not have any control over price and stock, which Automakers would manage.

Customers, the third stakeholders, would get the best experience, even better and more advanced than the traditional dealership experience, as Automakers would make their showrooms with the latest digital tech to virtually experience the cars with AR/VR, even Metaverse tech, digital kiosks, and Chatbots.

## **2. Omni Channel Enablement**

The customer experience on the online and offline channels gives the customers different views as they are not entirely synched with each other. This is going to be acted upon by Auto OEMs and dealers to provide a seamless, frictionless car buying experience no matter where customers want to buy their future cars. The omnichannel experience ensures that customers start their car buying journey on any channel, either online or offline and ends on any channel without having to think twice. They will get a uniform customer experience across channels. Customers can start their car-buying journey on any channel and finish it on another; for example, they can do the test drive offline and book the car online.

## **3. Virtual Showrooms**

Virtual showrooms cannot replace physical showrooms; however, it facilitates the car buying experience virtually with digital technology. The customer books a virtual showroom visit appointment at the Automakers/Dealers' website, then the real agent connects through a video call with the customer and presents the cars virtually to the Customer or the Customer themselves can virtually experience the cars using the VR gears. Virtual Showrooms eliminate the need for cars in all colours; customers can virtually augment the life-size car in their physical environment and change its colours and features, hear the ignition and close door sound and get a 360 view of the car from inside and outside.

## **4. Subscription model**

Subscriptions are nowadays standard business models adopted by brands; for example, Microsoft has provisioned the subscription for their office 365 suite wherein customers need to pay monthly and not lump sum and continue to get products updated frequently. Similarly, Amazon Prime has subscription plans, which enable customers to experience prime videos, music and prime deliveries of the goods they purchase on Amazon; Netflix has three different types of subscription plan catering to their customers' needs. Subscription plans allow users to access all premium products and services without having to be committed to them for years by buying them in a lump sum. Moreover, subscriptions provide flexibility and the option to stop whenever the customer wants.

Auto OEMs are exploring the subscription model in India with their selected models; for example, Hyundai, Mahindra, and Tata have their cars on subscription bases. In this model, the vehicles will not be legal in the customer's name; however, customers can still use it as if they own it; they need to pay a monthly fee for that which covers the cost of maintenance, insurance and running repairs. Customers can switch to any other car or even buy the same vehicle by paying the due price for that car. This would benefit customers who do not want to commit a lump sum or even opt for a car loan to fulfil their car-buying dream. They can still





own it by paying a monthly subscription fee and forget about its insurance and maintenance, which will be taken care of by Auto OEMs.

#### 10. Conclusion

Due to the Covid-19 pandemic, Automakers in India accelerated digital transformation, which was not a priority before Covid. However, the challenges are enormous in India, considering the cultural diversity, demography, income groups, and the purpose of the vehicle. Therefore, automakers in India need to change their mindset from product Driven to Customer-Centric in all aspects of product design, marketing, sales and aftermarket. Thus, customer experience (CX) strategies are taking higher priority for Automakers in India.

Positive CX creates a feeling of worthiness, respect, satisfaction, pride, and delight among prospective buyers. However, this positive feeling is possible only when the Dealers listen to their customer's needs and expectations and align the Automakers' CX (across Sales, Service and Marketing functions) strategies to meet their customers' expectations. CX is transforming the way traditional car sales used to happen by considering consumer behaviour and expectations and leveraging digital tech to its full capability to blur the boundaries between online and offline channels. For Automakers, it is more important to be an Omni channel rather than just sticking to Physical stores or multi-channel. As long as customers can experience a frictionless, seamless, positive car buying experience irrespective of whether they buy it online or at the Dealership, the Automakers and dealers will eventually succeed in enabling a truly Omni Channel customer experience.

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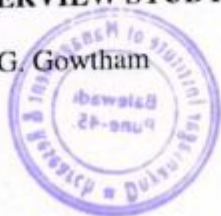




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## ANALYZING CUSTOMER RESPONSES TO FACTORS SHAPING PURCHASE DECISIONS IN THE TWO-WHEELER MARKET: THE ROLE OF INFORMATION SOURCES AND PROMOTIONAL TOOLS

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### ABSTRACT

*This study investigates the complex decision-making process of Indian consumers when selecting a two-wheeler brand in an increasingly crowded and competitive market. Two-wheelers have become the favoured mode of transportation due to traffic congestion and cost-effectiveness. However, consumers face a bewildering array of choices, prompting them to employ systematic evaluation methods.*

*This study unveils the motivations propelling consumers to select one two-wheeler brand over another. It meticulously examines the sources of information and influence that carry significant weight in consumers' decision-making processes. Moreover, it probes the realm of promotional tools, including celebrity endorsements, finance schemes, and enticing offers, to elucidate their role in stimulating purchase decisions.*

*In Pune, as in any other city, a purchase decision seldom unfolds in isolation. It is often the outcome of discussions with immediate family, relatives, friends, colleagues, and even the local mechanics whose expertise is sought in understanding these vehicles. These discussions form the crucible in which consumer preferences are forged, rendering the study of these interactions all the more pertinent.*

*As we venture deeper into Pune's bustling consumer landscape, our aim is to unravel the factors and influences that steer choices within this thriving metropolis. This research not only aims to provide insights valuable to manufacturers, marketers, and policymakers within the two-wheeler industry but also contributes to the broader understanding of consumer behaviour in the context of urban transportation preferences in India. Within Pune's narrative, we find echoes of the larger tale of choice, influence, and mobility in the modern world.*

### INTRODUCTION

In a nation that cherishes the freedom of movement, the two-wheeler has emerged as the quintessential companion for commuters seeking a seamless, cost-effective, and agile means of travel. The appeal of these vehicles extends far beyond their utilitarian aspects; it encapsulates the essence of convenience, style, and efficiency. Yet, this burgeoning market is a paradox in itself. While it offers consumers the liberty to explore a multitude of brands and models, it also presents them with a labyrinthine puzzle of choices. From the sleek city scooters designed for nimble urban navigation to the robust motorcycles built for long-haul adventures, each brand and model seeks to carve its niche in the hearts and lives of Indian consumers.

As we delve into this enthralling world of consumer preferences, Pune emerges as our focal point. This thriving city, much like the rest of India, has embraced two-wheelers with open arms. Pune's denizens, in their quest for pragmatic mobility solutions, find themselves at crossroads where a multitude of options converge. It's within this dynamic urban landscape that consumers wrestle with a complex interplay of factors and influences, ultimately shaping their brand preferences.

### Why Pune?

Pune's distinctive character lies in its blend of tradition and modernity. This city, known for its rich history, is also a burgeoning IT and industrial hub. As urbanization continues its march, the city's roadways have witnessed an influx of two-wheelers, mirroring a broader national trend. To unravel the intricate dynamics of brand selection, we focus on Pune – a microcosm of the larger Indian urban landscape.

### Navigating the Maze: Sources and Influences

In a world inundated with information, consumers embark on their two-wheeler journey with a diverse set of guiding stars. Friends, family, online reviews, television advertisements, the expert counsel of local mechanics – each plays a role in shaping the final decision. It is in these interactions and discussions that preferences are honed and choices are crystallized. This research endeavors to illuminate the pathways through which these sources and influences guide consumers' decisions.

### Beyond the Product: The Role of Promotion

In a realm where marketing and promotion hold sway, the role of celebrity endorsements, finance schemes, and alluring offers cannot be underestimated. These promotional tools have the power to sway decisions, often



transcending the product's intrinsic qualities. By delving into this dimension, we seek to understand how marketing strategies impact consumer choices.

### The Broader Implications

The insights drawn from this study extend beyond the boundaries of Pune. They offer valuable perspectives to manufacturers, marketers, and policymakers in the two-wheeler industry. Moreover, they contribute to a deeper understanding of consumer behavior in the context of urban transportation preferences across India.

### NEED OF THE STUDY

This study is indispensable in unravelling the intricate dynamics of consumer behaviour within Pune's two-wheeler market, which has burgeoned due to traffic congestion and the need for cost-effective urban mobility. With consumers facing an overwhelming array of choices, understanding the pivotal factors and influences guiding their purchase decisions is imperative. This research not only empowers consumers by providing insights for informed choices but also aids businesses in tailoring their strategies, thus enhancing market competitiveness. Policymakers can use these findings to craft consumer-centric regulations, while academia benefits from a nuanced understanding of urban transportation preferences. Moreover, the study holds economic significance, as it can bolster economic growth and job creation in Pune and the wider region.

### LITERATURE REVIEW

(Nath, 2006) conducted a study on 294 motorbike users in upper Assam to understand the impact of advertising and promotions on their buying behaviour and brand preferences. The research found that age significantly influenced brand choice, with younger individuals favouring premium brands and older individuals opting for economy brands. Interestingly, income levels did not correlate with motorcycle choice. The study highlighted the importance of advertising and promotions in influencing rural and urban consumers, with Hero-Honda emerging as the most preferred brand due to factors like comfort, fuel economy, and price. It emphasized the diverse nature of motorbike consumers and the need for tailored marketing efforts.

(Prof. Pradeep Biradar & Prof. K.M.Prashan, 2014) explored the role of advertising in the purchasing decisions of two-wheeler customers, both men and women. Their study focused on advertising strategies to attract consumers and create brand awareness. The research revealed that factors like better mileage, price, and engine power significantly influenced consumer choices. Effective advertising media support was seen as crucial for making consumers aware of product availability. The study underscored the challenge for marketers to make product information more appealing and distinct and suggested that Integrated Marketing Communication programs play a key role in target analysis, brand positioning, and product promotion.

(J. Martin Leonard, 2015) focuses on the showcasing and marketing strategies within the two-wheeler industry, emphasizing the crucial role of dealer networks and showrooms. It involves a sample of 40 showroom staff and 150 customers from four prominent showrooms in Tiruchirapalli. The research examines customer preferences, perceptions of dealer services, and satisfaction levels, as well as showcasing techniques, promotional activities, and company responsibilities in two-wheeler sales. The study's recommendations underscore the importance of enhancing customer services to attract a broader customer base.

(Chauhan, 2015) explores how various types of social media affect sales promotion and influence individuals and organizations in their buying decisions. The study concluded that social media indeed plays a substantial role in enhancing both sales and sales promotion within the automobile sector.

(Kamra, 2015) assessed the extent of social media's influence on Indian automotive consumers. Through comprehensive primary research, the results revealed a robust impact of social media across various parameters in the buying process. These parameters included vehicular research, recommendations, vehicle technologies, finance calculators, and Facebook page marketing. All of these aspects significantly influenced consumers before making their automobile purchases.

### OBJECTIVES OF THE STUDY

1. To examine the sources of information that influence consumers while making two-wheeler purchase decisions.
2. To assess the impact of promotional tools on consumers' buying choices.
3. To gain insights into how discussions with family members, relatives, friends, local mechanics, and local mechanics shape consumers' preferences and purchase decisions.

Director  
Dnyansagar Institute of Management and Research





**METHODOLOGY OF THE STUDY**

Data for this study was collected from both primary and secondary sources. Primary data was obtained from 755 two-wheeler customers in Pune through a structured questionnaire. These respondents provided insights into their demographic profiles and sources of information that influence consumers while making two-wheeler purchase decisions. The data was collected within two-wheeler dealer outlets in Pune, systematically tabulated, and analyzed. Additionally, the inclusion of secondary data from various reputable sources, such as books, journals, and reports, further enriches the study's context. The study follows a descriptive research design, employs Convenience Non-Probability Sampling, and focuses on Pune city as the study area.

**SCOPE OF THE STUDY**

The scope of this study encompasses a comprehensive exploration of the factors influencing two-wheeler purchase decisions among consumers in Pune, India, within the period of 2010 to 2015. It delves into demographic variations, sources of information, and the impact of promotional tools, while also considering the interpersonal influences that shape consumer choices. The study aims to provide valuable insights for manufacturers, marketers, policymakers, and consumers, offering a nuanced understanding of the complex decision-making process in the Pune two-wheeler market.

**RESULT & DISCUSSION**

**1. DEMOGRAPHIC PROFILE OF THE RESPONDENTS**

The demographic profile of the 755 respondents in this study, representing two-wheeler customers in Pune, encompasses a diverse range of age groups, income levels, genders, educational qualifications, and occupations.

**Table 1. Demographic Profile of Respondents**

<b>Gender</b>	Male	632 (83.7%)	Female	123 (16.3%)							
<b>Marital Status</b>	Single	486 (64.4%)	Married	269 (35.6%)							
<b>Age (in yrs)</b>	18 -21	106 (14.0%)	21-25	305 (40.4%)	25-35	242 (32.1%)	35-50	83 (11.0%)	50 and above	19 (2.5%)	
<b>Qualification</b>	High School	15	SSC	43	HSC	95	Graduation	387	PG	215	
<b>Occupation</b>	Student	241	Professional/ Business	195	Salaried	298	House wife	17	Retired	4	
<b>Annual Family Income (Rs.)</b>	Less than 1,50,000	23	1,50,000 to 2,50,000	175	2,50,000 to 5,00,000	253	5,00,000 and 10,00,000	179	10,00,000 and above	125	



The respondents in this study were drawn from Pune city, and they exhibited variations in key demographic aspects, including income group, educational qualifications, and occupation. Out of the total sample size of 755 respondents, a significant majority, comprising 632 individuals (83.7%), were males, while the remaining 123 (16.3%) were females. The age distribution among the male respondents indicated that 33.2% fell within the 21-25 years bracket, and 27.3% belonged to the 25-35 years category. Among female respondents, 7.2% were in the 21-25 years age group, and 4.8% were in the 25-35 years age group. Furthermore, a smaller subset of 19 respondents (16 males and 3 females) were aged above 50 years, and 11% fell within the 35-50 years age range, comprising 74 males (9.8%) and 9 females (1.2%). The marital status of the respondents revealed that 486 individuals (64%) were married, primarily owing to the prevalence of late adolescents in the respondent pool. In terms of occupation, the data showed that 39.5% of respondents were salaried, 31.9% were students, 25.80%



were professionals or businessmen, 2.3% were housewives, and the remaining 0.5% were retired. Notably, the highest usage of two-wheelers was observed among the salaried class. Regarding educational qualifications and income, 144 respondents (19.1%) were graduates with annual household incomes ranging from Rs. 2.5 to 5 lakhs. Conversely, there were only 11 respondents (1.1%) with lower educational qualifications and incomes (HSC and below HSC with less than Rs. 1.5 lakhs annual income). This data underscores that a majority of two-wheeler respondents in Pune are well-educated, highly qualified, and possess an annual average household income exceeding Rs. 1.5 lakhs.

**2. FACTORS INFLUENCING THE CUSTOMERS PURCHASE DECISION**

In Pune, a city where two-wheelers have emerged as the go-to mode of transportation owing to escalating traffic congestion and inadequate road infrastructure, owning a two-wheeler is a choice grounded in convenience, ease of use, cost-effectiveness, mobility, and hassle-free parking. However, the Indian two-wheeler market presents consumers with an abundance of choices, spanning various segments and brands, leaving them in a state of bewilderment. The relentless and inventive advertising and promotional campaigns by two-wheeler companies add to the complexity of the purchasing decision. In this technologically driven age, consumers meticulously evaluate brands before making their choices, a process that's crucial in an industry characterized by a multitude of competitors. This study, set against the backdrop of Pune city, seeks to unravel the factors guiding the purchase decisions of respondents, shedding light on what prompts them to select one two-wheeler brand over others in this bustling urban environment.

**2.1 SOURCE OF INFORMATION**

The most important ingredient in the buying process is information. No buyer can actually buy a product without having sufficient and adequate information. Acquisition of information is the first step in the buying process. In a normal buying process, acquisition of information is a multifarious task which is completed by using various formal and informal sources. What sources of information buyers use for collection of information and how they process this information is studied by the researcher. The questionnaire has incorporated a scale, where in the respondents were requested to rank the identified sources (TV, Friends/Relatives, Displays, etc) that registered the brand while making buying decision. The respondents were requested to rank these parameters on a seven point scale, where 1 meant least influential and 7 meant most influential. The data collected is shown in table below:

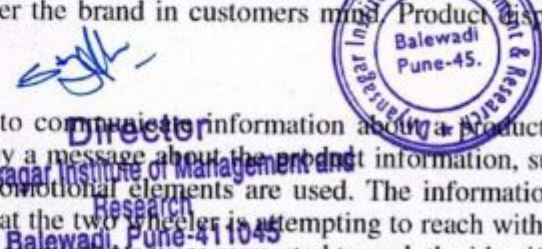
**Table 2: Influence of various Sources of Information**

Responses	Friends / Relatives	TV	Local Mechanic	Displays	Internet/ Social Media	Hoardings/ Banners	Newspaper/ Magazine
Least Influential	6.1	6.1	21.1	9.0	22.9	13.2	20.5
2	5.4	8.2	13.6	15.9	11.7	23.4	20.8
3	6.6	9.1	14.6	14.7	18.4	18.4	16.6
4	10.3	12.5	12.7	20.4	12.7	16.8	15.4
5	10.5	17.5	16.3	15.0	15.6	15.5	10.9
6	15.8	24.5	14.2	13.4	10.6	9.9	11.9
Most Influential	45.3	22.1	7.5	11.7	8.1	2.6	4.0
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

From the above it is observed that influence of friends/relatives is ranked highly 61.1% to register the brand in customers mind followed by Television (46.6%). Whereas local mechanics, hoardings/ banners, newspaper/ magazine and paper insertions are not so influential to register the brand in customers mind. Product display shows a neutral influencing balance on registering the brand.

**2.2 PROMOTIONAL ELEMENT**

Basic requirement and desire of a two wheeler company is to convey information about a product to potential customers and influence customers to buy. To convey a message about the product information, such as features, benefits, quality, usage and price a variety of promotional elements are used. The informational cognizance depends on the response of the target customers that the two wheeler is attempting to reach with its message. The researcher has incorporated a scale, where in the respondents were requested to rank the identified





promotional tools (Advertisements, Celebrity Endorsement, Finance schemes, etc.) that triggered the buying decision. The respondents were appealed to rank these parameters on a six point scale, where 1 meant least influential and 6 meant most influential. Table 4.18 shows their responses in this regard.

Table 3: Ranking of different promotional elements

Responses	Celebrity Endorsement	Advertisement	Finance Schemes	Attractive Discount Offers	Promotional Campaign	Contest / Sweepstake
Least Influential	16.8	3.0	9.1	7.5	8.9	54.0
2	17.5	10.2	12.2	10.2	28.9	20.7
3	17.4	9.9	16.4	18.1	25.8	11.8
4	15.8	12.1	20.4	23.2	20.0	9.8
5	17.6	22.0	23.7	23.2	11.1	3.0
Most Influential	15.0	42.8	18.1	17.7	5.3	.7
Total	100%	100%	100%	100%	100%	100%

Form the above table it is inferred that 62.8% of the respondents have ranked advertisement as influential promotional element that persuade the customer to buy followed by finance schemes 41.8% as second influential factor and attractive discount offers 40.9% as third influential factor. Form the above table the respondents are neutral with impulse to buy the brand due to the influence of celebrity endorsement. Form the above table 74.7% of the respondents are not influenced to buy due to contest or sweepstake.

2.2.1 Effectiveness of promotional tools

In all eight promotional tools given with the scale of 1-5, where 1- Not at all effective, 2- Less Effective, 3- Neutral, 4- Effective and 5- Very effective to customers and dealers and responses were analysed.

Table 4: Ranking of Effective Promotional Tools

Promotional Tools	Mean Rank	
	Customers view	Dealers view
TV	4.87	4.64
Internet/Social Media	3.49	3.36
Hoardings / Banners	3.37	4.41
Newspaper / Magazine	3.25	5.72
Finance Schemes	3.92	4.88
Attractive Discount Offers	3.97	5.16
Promotional Campaign	3.11	4.55
Contest / Sweepstake	1.88	3.28

It is observed from the table that television, attractive discount offers and finance schemes are most effective promotional tools as per customer's responses whereas newspaper / magazine, attractive discount offers and finance schemes are top three effective promotional tools as per dealer's responses.

2.3 MAJOR INFLUENCE ON PURCHASE DECISION

An individual tends to discuss with his immediate family members, relatives, friends, colleagues and may be his local mechanics before purchasing a particular product or service. All these members might support an individual's decision to buy a particular product, stop him from purchasing it or suggest few other options. They influence the purchase decision of a customer.

Table 5: Major influence on purchase decision regarding the brand/model

	Frequency	Percent
Self	275	36.4
Family Members	257	34.0



Friends / Relatives	189	25.0
Colleagues	20	2.6
Local Mechanic	14	1.9
Total	755	100.0

From the above table, it is inferred that the 36.4% of the respondent's decision is self-made, 34.0% of the respondents choose the brand by the influence of family members wish and 25.0% of the respondents choose this brand by the influence of their friends. Colleagues and local mechanics have very negligible influence on purchase decisions regarding the brand.

**2.5 BUYING PREFERENCE GIVEN TO A VEHICLE WHICH IS USED BY FRIEND/ RELATIVES/ COLLEAGUES**

**Table 6: Preference given to a vehicle which is used by Friend/ relatives/ colleagues**

	Frequency	Percent
Yes	534	70.7
No	221	29.3
Total	755	100.0

From the above table, it is inferred that 70.7% of the respondents give preference in buying a vehicle used by their friends/relatives/ colleagues and 29.3% respondents do not prefer to buy a vehicle used by any of their friends/relatives/ colleagues. Customers change as per their associations with the different individual i.e. the extended family individuals like the relatives, friends and colleagues providing them with information and support. The customers offer inclination to the perspectives of these individuals to lessen the risk and uncertainty they associate with the purchasing task.

**FINDINGS**

- Sources of Information:** Friends and relatives are the most influential sources of information for customers in Pune, with 61.1% ranking them as highly influential, followed by television at 46.6%. Local mechanics, hoardings/banners, newspapers/magazines, and paper insertions have a lower impact on brand registration.
- Promotional Elements:** Advertisements are ranked as the most influential promotional element, with 62.8% of respondents considering them persuasive. Finance schemes and attractive discount offers also play significant roles in the buying decision, with 41.8% and 40.9% of respondents finding them influential, respectively. Celebrity endorsements have a neutral influence.
- Major Influence on Purchase Decision:** Self is the major influencer for 36.4% of respondents, while 34.0% are influenced by family members, and 25.0% are influenced by friends/relatives when making purchase decisions. Colleagues and local mechanics have minimal influence.
- Buying Preference Based on Associations:** A significant portion of respondents, 70.7%, prefer to buy a vehicle used by their friends, relatives, or colleagues, indicating the impact of social networks on purchase decisions.

**SCOPE FOR FUTURE STUDY:**

Future research can explore the dynamics of information sources and promotional tools in other cities and regions in India to identify regional variations in consumer behavior. Additionally, studying the effectiveness of specific advertising and promotional campaigns on two-wheeler purchase decisions could provide valuable insights for marketing strategies.

**LIMITATIONS OF THE STUDY:**

- The study is limited to Pune city, and findings may not fully represent consumer behavior in other Indian cities.
- The study relies on self-reported data, which may be subject to response bias.
- Factors such as cultural influences and brand loyalty were not deeply explored and could be considered in future research.

**SUGGESTIONS**

In light of the findings, it is recommended that businesses operating in Pune's two-wheeler market adapt their marketing strategies to harness the significant influence of information sources, including both traditional channels like television advertisements and digital platforms such as social media. Recognizing the generational

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shift towards online information-seeking among younger buyers, companies should bolster their online presence and engagement. Moreover, the study highlights the persuasive power of well-crafted advertisements, finance schemes, and discount offers, underscoring the importance of aligning promotional tools with consumer preferences. Building on the paramount role of social networks, businesses should actively encourage positive word-of-mouth and personal recommendations, which remain pivotal in purchase decisions. Given the diversity of Pune's two-wheeler consumers, tailoring marketing approaches to specific demographic segments can enhance brand appeal. While this study offers valuable insights into Pune's market, future research could delve deeper into regional variations and the effectiveness of targeted marketing campaigns, providing businesses with an edge in the ever-evolving and competitive Indian two-wheeler industry.

### CONCLUSION

In the dynamic landscape of the two-wheeler market in Pune, this study delves into the multifaceted factors that steer consumer purchase decisions. It becomes evident that information sources wield substantial influence, with friends and relatives emerging as formidable opinion-shapers, and television advertisements casting a significant sway over consumer choices. However, the digital age has brought forth a generational shift, with younger buyers turning to the internet and social media for information, underlining the evolving nature of consumer preferences.

Promotional elements also play a pivotal role, with advertisements reigning supreme as the most persuasive tool. Finance schemes and attractive discount offers are influential in wooing customers, whereas celebrity endorsements appear to tread a more neutral ground. This nuanced understanding of promotional tools can aid businesses in crafting strategies that align with the preferences of their target audience.

It is intriguing to note the paramount role of social networks in purchase decisions. Friends, family, and colleagues contribute substantially to the decision-making process, underscoring the significance of personal recommendations and word-of-mouth in shaping consumer choices.

Moreover, the study's insights into the demographic profile of respondents reveal that Pune's two-wheeler consumers are a diverse group, spanning various age groups, marital statuses, occupations, and income brackets. This diversity presents an opportunity for businesses to tailor their marketing approaches to cater to the specific needs and preferences of different segments.

While this study provides valuable insights into the factors influencing two-wheeler purchase decisions in Pune, it is crucial to acknowledge its limitations. The findings are specific to Pune and may not be fully representative of consumer behavior in other Indian cities. Additionally, the reliance on self-reported data introduces the possibility of response bias.

As the Indian two-wheeler market continues to evolve, future research can explore regional variations in consumer behavior and the effectiveness of targeted marketing campaigns. Understanding the ever-changing dynamics of this industry will be essential for businesses aiming to thrive in the competitive and vibrant two-wheeler market.

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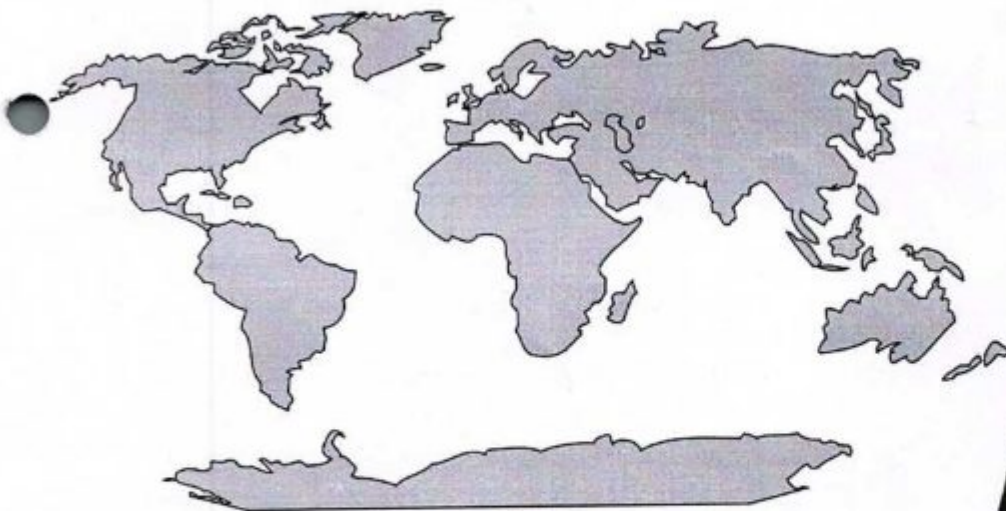



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DECIPHERING CUSTOMER PURCHASE PRIORITIES: INSIGHTS FROM TWO-WHEELER DEALER MANAGERS IN PUNE

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ABSTRACT

*This research explores the nuanced perspectives of two-wheeler dealer managers in Pune, regarding the prioritization of various factors influencing customers' purchasing decisions. It delves into the perceptions of these key industry stakeholders, shedding light on their insights into what drives customers to buy two wheelers. The study encompasses a diverse range of two-wheeler categories, including 100cc motorcycles, 125cc motorcycles, 150cc motorcycles, larger motorcycles (150cc and above), and scooterettes.*

*To ascertain the dealer managers' viewpoints, a structured survey was conducted, employing a scale of 1 to 8, where 1 signifies "not at all important," and 8 denotes "extremely important." The critical factors under consideration encompassed Mileage, Price, Style and Aesthetics, Pick-up, Cost of Maintenance, Comfort, Colour, and Safety. By soliciting responses from 74 dealer managers from leading manufacturers such as Hero Moto Corp, Bajaj Auto Ltd., Honda Motorcycle and Scooters India Pvt. Ltd., Yamaha Motors India, TVS Motors Company Limited, Mahindra Two Wheelers Limited, and Suzuki Motorcycle India Pvt. Ltd., this research offers valuable insights into how these managers perceive the hierarchy of factors influencing their customers' purchase decisions.*

*The findings of this study illuminate intriguing patterns in customer preferences across different two-wheeler categories, contributing to a more profound understanding of the evolving dynamics within the Pune two-wheeler market. This research provides valuable insights for both manufacturers and marketers, allowing them to tailor their strategies to better align with customer preferences and industry trends.*

INTRODUCTION

The Indian two-wheeler market stands as a testament to the country's love affair with motorcycles and scooters. It is not merely a mode of transportation but a symbol of freedom, convenience, and style. The market's significance transcends its utilitarian aspect; it mirrors the evolving aspirations and preferences of a diverse populace. With rapid technological advancements, shifting customer preferences, and evolving government regulations, this market presents both opportunities and challenges for manufacturers and marketers. In this vibrant landscape, understanding the factors influencing customers' purchasing decisions is essential, and the perspectives of two-wheeler dealer managers are central to this understanding. To thrive in this competitive landscape, it is essential to gain profound insights into customer preferences and the factors influencing their purchasing decisions across various segments of the two-wheeler market.

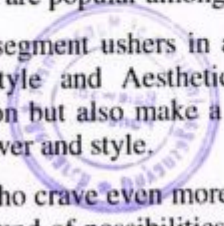
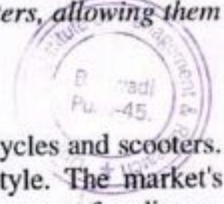
The Indian two-wheeler market is a kaleidoscope of possibilities. It encompasses a wide spectrum of segments, each catering to a unique set of needs and desires. From the nimble and efficient 100cc motorcycles that zip through city traffic to the powerful 150cc and above motorcycles designed for enthusiasts, and the stylish and versatile scooterettes tailored for urban mobility, the market has something for everyone.

In the 100cc segment, efficiency and affordability are paramount. Customers in this category often prioritize factors like Mileage and Price, seeking cost-effective and fuel-efficient options for their daily commutes. These vehicles are the lifeblood of India's congested urban streets, providing a practical solution to millions of commuters.

Moving up the ladder, the 125cc segment introduces a dash of style and performance. Here, customers begin to weigh factors like Style and Aesthetics and Pick-up, seeking a balance between utility and aesthetics. These motorcycles are popular among urban and semi-urban riders who crave a bit of flair in their daily rides.

The 150cc segment ushers in a new era of performance and sophistication. Customers in this category often prioritize Style and Aesthetics and Pick-up, looking for motorcycles that not only serve as practical transportation but also make a statement. This segment caters to the aspirational desires of riders who seek a blend of power and style.

For those who crave even more power and features, the category of motorcycles above 150cc and scooters is a playground of possibilities. Here, factors like Pick-up and Style and Aesthetics take center stage, as riders



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yearn for high-performance machines that turn heads on the road. These motorcycles are often seen as status symbols and are favoured by enthusiasts and long-distance travellers.

In contrast, the scooterette segment redefines urban mobility. Designed with a focus on Comfort and Style and Aesthetics, scooterettes are often the preferred choice for city dwellers seeking a convenient and chic way to navigate through traffic. Safety features also gain importance in this category, especially as more female riders and older individuals opt for scooterettes.

In this intricate tapestry of segments, the roles of two-wheeler dealer managers are pivotal. They are not just salespeople but guides, helping customers navigate through the maze of options to find the perfect fit for their needs and aspirations. Their insights into how different factors are ranked in each segment shed light on the evolving preferences of customers and the strategies that manufacturers and marketers can adopt to meet these preferences. This exploration into the minds of two-wheeler dealer managers is not merely an academic exercise; it is a quest for actionable insights. Manufacturers and marketers in the two-wheeler industry can leverage these insights to fine-tune their strategies, aligning them more closely with customer preferences. As the Pune two-wheeler market continues to evolve, understanding the factors that guide customer choices is not just an advantage but a necessity.

### NEED OF THE STUDY

The Indian two-wheeler market is a dynamic and multifaceted industry that serves a diverse customer base with varying preferences. This study is essential to address several critical aspects of the market. Firstly, it provides insights into the distinct preferences of different customer segments, from urban commuters to adventure enthusiasts, enabling manufacturers to tailor their products effectively. Secondly, in the face of technological advancements and evolving government regulations, understanding customer attitudes toward innovations such as electric vehicles and safety standards is crucial for market relevance. Additionally, this research sheds light on the competitive landscape, aiding manufacturers in building brand loyalty and making informed decisions regarding resource allocation. Furthermore, as the market expands into new regions and demographics, insights into regional variations in customer priorities are vital for strategic expansion. Lastly, in an era of customer-centricity and changing policies, this study equips manufacturers with the knowledge needed to navigate the complex terrain of India's two-wheeler industry, ensuring compliance, customer satisfaction, and sustainable growth.

### LITERATURE REVIEW

(Saillaja V, 2013), meticulously researched that the Indian Two-Wheeler Industry stands as the global leader with unmatched production and sales volumes. With a significant 9.5 percent growth rate recorded from 2006 to 2014, India has firmly established itself as the world's foremost two-wheeler market. Notably, the 2014-15 fiscal year witnessed an exceptional year-on-year volume growth of 14.8 percent, underscoring the industry's robust performance. The 'Make in India' campaign promises to further boost this momentum by attracting increased foreign investment, offering substantial growth prospects for the industry.

(Amechi & Long, 2013) examined the queries verged with respect to advertising clutters, medium, message, method, timing and their effect on attaining marketing and sales objectives. Extensive literature review facilitated to establish the cause and effect relationship between point of purchase (POP) advertising and consumer purchase behaviour. The suggestions would encourage corporate organisations to enhance their point of purchase (POP) advertising and marketing strategies towards escalating the overall sales.

(Baxendale Shane, 2015) delves into the influence of various touchpoints or points of interaction between consumers and a brand on the consumers' consideration of that brand. It also explore how different marketing channels and interactions affect brand perception and purchase intent.

(Gomathy, 2015) focuses on the distribution sector, highlighting its significance as a bridge between manufacturers and consumers. It acknowledges the positive effects of rapid economic growth, including access to a skilled workforce, industrial modernization, and increased availability of retail space. The study specifically examines how changing consumer preferences for quality and safety in products and services impact the retail sector. Additionally, it explores retailer perceptions regarding consumer buying behavior, preferences, and purchase decisions related to soy products like soya lumps, soya nuts, soya granules, soya chips, and soya flour.

(Mohd. Talha Khan & R.S. Jadoun, 2015) made use of SERVQUAL model to measure and identify the gap between the service quality offered by the selected two wheeler automobile industries (Hero, Bajaj and Honda). The data was collected through questionnaire from users of Hero, Bajaj and Honda residing in Lucknow, Moradabad and Noida. The study states that Bajaj with overall perceived service quality level 2.972 provides the best after sales service, followed by Hero with 2.869 and Honda with 2.822. The research recognized the gap



between expectation and perception in case of customers of Hero and Honda. No such gap was found in Bajaj service industry.

#### OBJECTIVES OF THE STUDY:

1. To assess how managers rank crucial factors influencing customer decisions for different two-wheeler segments.
2. To explore how perceptions of these factors vary across distinct two-wheeler categories according to managerial insights.
3. To gain insights into the factors that managers believe are most significant for customers when purchasing two-wheelers within each category.

#### RESEARCH METHODOLOGY:

This study employs a quantitative research approach to analyze the perception of two-wheeler dealer managers regarding the ranking of factors influencing customer purchasing decisions in various two-wheeler categories. The research design encompasses the following key components:

1. **Data Collection:** Data is collected through structured interviews conducted with 74 two-wheeler dealer managers in Pune city. These managers represent dealerships associated with prominent two-wheeler manufacturers, including Hero Moto Corp, Bajaj Auto Ltd., Honda Motorcycle and Scooters India Pvt. Ltd., Yamaha Motors India, TVS Motors Company Limited, Mahindra Two Wheelers Limited, and Suzuki Motorcycle India Pvt. Ltd.
2. **Research Instrument:** A structured questionnaire is utilized as the primary research instrument. The questionnaire is designed to assess the perceived importance of various factors, such as Mileage, Price, Style and Aesthetics, Pick-up, Cost of maintenance, Comfort, Colour, and Safety, on a scale of 1 to 8, where 1 indicates "not at all important," and 8 signifies "extremely important."
3. **Sampling:** The study employs a census sampling technique, encompassing all 85 identified two-wheeler dealer managers in Pune city. However, data is successfully collected from 74 respondents due to the reluctance of 11 managers to share business information.
4. **Data Analysis:** Collected data is subjected to comprehensive statistical analysis, including descriptive statistics, mean ranking, and percentage distribution, to derive meaningful insights into the ranking of factors across different two-wheeler categories.
5. **Segmentation:** The data is segmented according to the categories of two-wheelers, which include 100cc motorcycles, 125cc motorcycles, 150cc motorcycles, motorcycles 150cc and above, and scooterettes. This segmentation allows for a focused analysis of manager perceptions within each category.
6. **Statistical Software:** Statistical software, such as SPSS, is utilized for data analysis, enabling the generation of tables, graphs, and inferential statistics to draw conclusions.

The research methodology employed in this study ensures a systematic and rigorous investigation into the perception of two-wheeler dealer managers, shedding light on the factors deemed crucial in the sale of two-wheelers across diverse categories.

#### SCOPE OF THE STUDY:

This study has a specific focus on understanding the perceptions of Two-Wheeler Dealer Managers in Pune regarding how they rank the factors that influence customer purchase decisions. The research encompasses various categories of two-wheelers, including 100cc motorcycles, 125cc motorcycles, 150cc motorcycles, motorcycles of 150cc and above, and scooterettes.

#### RESULT & ANALYSIS

##### 1. PROFILE OF DEALERS

In the pursuit of understanding the dynamics of the two-wheeler market in Pune city, the researcher engaged with a total of 85 two-wheeler dealers. Out of this comprehensive sample, valuable insights were successfully gathered from 74 two-wheeler dealers in Pune city.

The distribution of these dealers across various two-wheeler companies is outlined in table below:

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**Table 1: No of Dealers of Two Wheeler Company**

	Frequency	Percent
Bajaj	11	14.9
Hero MotoCorp	12	16.2
TVS	14	18.9
Yamaha	8	10.8
Honda	15	20.2
Suzuki	6	8.2
Mahindra & Mahindra	8	10.8
Total	74	100.0

From the above data, it becomes evident that the research has successfully encompassed a diverse range of two-wheeler companies. Honda emerges as the leading company represented among the dealers, commanding a significant share of 20.2%. TVS and Hero MotoCorp closely follow with 18.9% and 16.2% respectively. Bajaj secures 14.9%, while Mahindra & Mahindra and Yamaha each account for 10.8%. Suzuki, though represented by a smaller number, contributes to the research with 8.2%.

This diverse profile of dealers ensures a comprehensive and holistic understanding of the two-wheeler market in Pune city, providing valuable insights into the preferences and perceptions of dealers associated with prominent two-wheeler manufacturers.

## 2. PERCEPTION OF TWO WHEELER DEALER MANAGERS ABOUT RANKING OF DIFFERENT FACTORS WHILE SELLING

(on a scale of 1-8, where 1- not at all important and 8- extremely important)

In the vibrant landscape of the two-wheeler industry, understanding the intricacies of customer preferences and the factors that drive their purchase decisions is of paramount importance. A multitude of factors influence a customer's choice when considering the acquisition of a two-wheeler, and these factors play a pivotal role in shaping the strategies employed by dealerships.

The primary determinants that sway a customer's decision-making process encompass a spectrum of attributes, including Mileage, Price, Style and Aesthetics, Pick-up, Cost of maintenance, Comfort, Colour, and Safety. These facets collectively form the cornerstone of a customer's evaluation criteria when embarking on the journey to select their ideal two-wheeler companion.

To delve deeper into the realm of consumer choices and the strategies adopted by dealerships, this study focuses on gauging the perceptions of two-wheeler dealer managers. These professionals, stationed at the forefront of the industry, possess a unique vantage point. They are tasked with not only comprehending the intricate interplay of these factors but also with ranking them in order of importance when facilitating the sale of specific two-wheeler categories.

Utilizing a finely calibrated scale ranging from 1 (indicating "not at all important") to 8 (representing "extremely important"), this research endeavors to unravel the nuanced variations in dealer managers' perspectives. Importantly, these perspectives are dissected concerning different categories of two-wheelers, recognizing that what holds true for one category may not necessarily align with another.

In essence, this study serves as a compass, guiding us through the intricate web of factors that steer customer choices and dealer strategies in the dynamic landscape of the two-wheeler industry. The findings promise to shed light on the varying importance attributed to these factors by dealers across distinct two-wheeler categories, ultimately enriching our understanding of this dynamic market.

**The dealers are of the different opinion for different category of vehicle.**

### 2.1 Category A: Motorcycle 100cc - Dealers' Ranking of Important Factors

In the realm of 100cc motorcycles, where cost-effectiveness often takes center stage, dealers' perspectives on the importance of various factors come to the fore. The table below provides a comprehensive overview of how dealers rank these factors on a scale from 1 (not at all important) to 8 (extremely important):

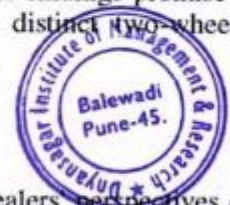




Table 2: Perception of Managers about ranking the important factors for Category A: Motorcycle 100cc

Factors	Ranking							
	1 not at all important.	2	3	4	5	6	7	8 extremely important
Mileage	0	0	0	0	0	2.7	32.4	64.9
Price	0	0	0	0	1.4	4.1	60.8	33.8
Style and Aesthetics	4.1	5.4	5.4	23.0	50.0	12.2	0	0
Pick-up	2.7	6.8	29.7	39.2	12.2	8.1	1.4	0
Cost of maintenance	6.8	1.4	12.2	6.8	4.1	62.2	5.4	1.4
Comfort	5.4	31.1	20.3	25.7	17.6	0	0	0
Colour	12.2	31.1	27.0	5.4	13.5	10.8	0	0
Safety	68.9	24.3	5.4	0	1.4	0	0	0

Analyzing the data, it becomes evident that, for Category 'A' motorcycles, which typically cater to cost-conscious customers, dealers accord the highest importance to mileage (97.3%) and price (94.6%). These two factors overwhelmingly dominate the decision-making process. Notably, cost of maintenance also finds its place among the top considerations for customers in this category.

This ranking reflects the pragmatic preferences of customers in this segment, emphasizing frugality and affordability as key drivers in their purchasing decisions.

2.2 Category B: Motorcycle 125cc - Dealers' Ranking of Important Factors

In the domain of 125cc motorcycles, where versatility and affordability often reign supreme, dealers' insights shed light on the factors that hold the most sway in the minds of customers. The table below showcases how dealers rank these factors on a scale from 1 (not at all important) to 8 (extremely important):

Table 3: Perception of Managers about ranking the important factors for Category B: Motorcycle 125cc

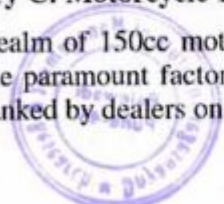
Factors	Ranking							
	1 not at all important.	2	3	4	5	6	7	8 extremely important
Mileage	0	1.4	1.4	6.8	0	33.8	31.1	25.7
Price	0	0	0	1.4	4.1	32.4	44.6	17.6
Style and Aesthetics	1.4	0	0	14.9	0	27.0	12.2	44.6
Pick-up	0	1.4	6.8	12.2	20.3	5.4	16.2	37.8
Cost of maintenance	20.3	1.4	20.3	28.4	27.0	1.4	1.4	0
Comfort	10.8	37.8	21.6	25.7	1.4	1.4	1.4	0
Colour	6.8	33.8	41.9	4.1	13.5	0	0	0
Safety	60.8	24.3	8.1	6.8		0	0	0

Upon scrutinizing the data, it becomes evident that, for Category 'B' motorcycles, which cater to customers seeking a balance between performance and cost-effectiveness, dealers place high importance on price (94.6%) and mileage (90%). These two factors top the list, closely followed by style and aesthetics (83.8%) and pick-up (60%). Safety and comfort, while still considered, do not take precedence in the decision-making process for customers in this category.

This ranking underscores the pragmatic preferences of customers in the 125cc segment, where economic considerations and aesthetics play significant roles in influencing their purchasing decisions.

2.3 Category C: Motorcycle 150cc - Dealers' Ranking of Important Factors

Within the realm of 150cc motorcycles, renowned for their performance and versatility, dealers' perspectives illuminate the paramount factors guiding customer choices. Presented below is a table showcasing how these factors are ranked by dealers on a scale from 1 (not at all important) to 8 (extremely important):



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Table 4: Perception of Managers about ranking the important factors for Category C: Motorcycle 150cc

Factors	Ranking							
	1 not at all important.	2	3	4	5	6	7	8 extremely important
Mileage	1.4	12.2	45.9	21.6	18.9	0	0	0
Price	0	1.4	6.8	17.6	10.8	62.2	1.4	0
Style and Aesthetics	0	1.4	0	0	0	1.4	41.9	55.4
Pick-up	0	0	0	0	0	4.1	52.7	43.2
Cost of maintenance	43.2	54.1	2.7	0	0	0	0	0
Comfort	0	1.4	4.1	29.7	37.8	24.3	2.7	0
Colour	51.4	13.5	16.2	4.1	10.8	1.4	2.7	0
Safety	2.7	16.2	28.4	27.0	20.3	5.4	0	0

Upon careful analysis of the data, it becomes evident that for Category 'C' motorcycles, which cater to enthusiasts seeking a balance between performance and style, dealers attribute the highest importance to style and aesthetics (97.3%) and pick-up (95.9%). These two factors prominently dominate the decision-making process for customers in this category. Interestingly, even though price (63.6%) is not the primary factor, it still holds significance, suggesting that customers in this segment compare brands based on pricing in addition to style, aesthetics, and power.

This ranking underscores the discerning tastes of customers in the 150cc segment, where the blend of style, performance, and affordability takes center stage in their purchase considerations.

#### 2.4 Category D: Motorcycle 150cc and above - Dealers' Ranking of Important Factors

Within the realm of motorcycles boasting 150cc and higher, renowned for their power and premium features, dealers' insights shed light on the paramount factors influencing customer choices. Presented below is a table showcasing how these factors are ranked by dealers on a scale from 1 (not at all important) to 8 (extremely important):

Table 5: Perception of Managers about ranking the important factors for Category D: Motorcycle 150cc and above

Factors	Ranking							
	1 not at all important.	2	3	4	5	6	7	8 extremely important
Mileage	0	14.9	81.1	4.1	0	0	0	0
Price	2.7	2.7	4.1	78.4	1.4	9.5	1.4	0
Style and Aesthetics	0	0	0	0	1.4	12.2	51.4	35.1
Pick-up	0	0	0	0	2.7	6.8	35.1	55.4
Cost of maintenance	14.9	74.3	6.8	4.1	0	0	0	0
Comfort	0	0	1.4	10.8	45.9	24.3	8.1	9.5
Colour	83.8	6.8	6.8	2.7	0	0	0	0
Safety	0	0	0	0	48.6	47.3	4.1	0

Upon meticulous examination of the data, it is evident that for Category 'D' motorcycles, designed for discerning customers seeking power and luxury, dealers attribute the highest importance to pick-up (90.5%) and style and aesthetics (86.5%). These two factors prominently dominate the decision-making process for customers in this category. Remarkably, safety (48.6%) and comfort (45.9%) also hold significant sway over customer choices, as indicated by the responses of two-wheeler managers.

This ranking highlights the multifaceted preferences of customers in the 150cc and above segment, where the fusion of power, style, safety, and comfort play pivotal roles in their purchase considerations.

#### 2.5 Category E: Scooterette - Dealers' Ranking of Important Factors

Exploring the unique realm of Category 'E' vehicles, specifically scooterettes, dealers' perspectives illuminate the critical factors influencing customer choices. Presented below is a comprehensive table illustrating how these factors are ranked by dealers, utilizing a scale ranging from 1 (not at all important) to 8 (extremely important):



**Table 6: Perception of Managers about ranking the important factors for Category E: Scooterette**

Factors	Ranking							
	1 not at all important	2	3	4	5	6	7	8 extremely important
Mileage	4.1	40.5	48.6	0	2.7	2.7	1.4	0
Price	2.7	1.4	18.9	55.4	8.1	6.8	6.8	0
Style and Aesthetics	0	0	0	0	17.6	21.6	39.2	21.6
Pick-up	1.4	33.8	20.3	27.0	16.2	1.4	0	0
Cost of maintenance	75.7	20.3	2.7	1.4	0	0	0	0
Comfort	0	0	0	2.7	2.7	12.2	25.7	56.8
Colour	16.2	2.7	9.5	12.2	39.2	17.6	2.7	0
Safety	0	1.4	1.4	0	13.5	40.5	23.0	20.3

Upon a meticulous evaluation of the data, it is evident that for Category 'E' Scooterettes, tailored to cater predominantly to female riders, dealers attribute the highest importance to comfort (56.8%) and style and aesthetics (39.2%). Remarkably, even males in their forties exhibit a growing affinity for these vehicles due to the paramount factor of comfort. Safety (40.5%) also emerges as a noteworthy consideration in this category.

This ranking underscores the multifaceted preferences within the Scooterette segment, where a harmonious blend of comfort, style, and safety plays a pivotal role in customer decision-making, catering to both the female demographic and a broader spectrum of riders.

#### FINDINGS:

##### 1. Category A: Motorcycle 100cc

- Mileage (64.9%) and Price (60.8%) are the paramount factors influencing purchase decisions in this category.
- Customers in this segment exhibit a strong cost-conscious behavior.

##### 2. Category B: Motorcycle 125cc

- Price (94.6%) is the most influential factor, followed by mileage (90%) and style and aesthetics (83.8%).
- Safety and comfort are less dominant in this category.

##### 3. Category C: Motorcycle 150cc

- Style and aesthetics (97.3%) and pick-up (95.9%) dominate customer preferences.
- Price plays a significant role (63.6%) as well.

##### 4. Category D: Motorcycle 150cc and above

- Pick-up (90.5%) and style and aesthetics (86.5%) are the primary factors influencing choices.
- Notably, safety and comfort are also considered by customers.

##### 5. Category E: Scooterette

- Comfort (56.8%) and style and aesthetics (39.2%) are the top priorities, catering to female riders and older male consumers.
- Safety (40.5%) is another vital consideration in this category.

#### SCOPE FOR FURTHER RESEARCH:

Exploring the following areas could enhance our understanding of this domain:

1. **Customer Surveys:** Conduct surveys to validate if dealers' perceptions align with actual customer preferences.
2. **Regional Variations:** Investigate how preferences vary in different regions and cultures.
3. **Changing Trends:** Analyze how evolving market trends impact the factors influencing vehicle purchases.



**LIMITATIONS:**

1. **Sample Size:** The study was limited to **74 out of 85 dealers** in Pune, potentially introducing sample bias.
2. **Geographic Focus:** It primarily focuses on Pune, so the findings may not be entirely representative of the broader Indian market.

**SUGGESTIONS:**

Tailoring marketing strategies to align with the distinct preferences of each two-wheeler category is essential. For instance, in the Motorcycle 100cc segment, emphasizing affordability and fuel efficiency is key, while in the Motorcycle 150cc category, focusing on style and competitive pricing is crucial. Safety considerations, though varying in importance, should be addressed across all categories. Diversifying product offerings to match these preferences, ensuring price competitiveness, educating customers about value propositions, and embracing innovation to meet evolving demands are critical strategies to effectively capture the diverse customer base within the two-wheeler market.

**CONCLUSION:**

This research endeavour has provided valuable insights into the intricate landscape of the Indian two-wheeler market, elucidating the multifaceted factors that sway customer choices across different vehicle categories. The discerning analysis of dealers' perceptions has illuminated critical dimensions of consumer behavior, shedding light on the paramount significance of variables such as price, mileage, style, aesthetics, and safety in shaping purchase decisions.

The study underscores the nuanced nature of the Indian two-wheeler market, which caters to a heterogeneous clientele with divergent preferences. It is evident that the Indian consumer's quest for two-wheelers is not homogenous; instead, it reflects a complex interplay of economic considerations, aesthetic inclinations, and functional priorities. These findings are of profound relevance to industry stakeholders, offering them a compass to navigate the intricate market dynamics.

Nonetheless, it is imperative to acknowledge the limitations of this research, including sample size constraints and regional focus. The study leans on dealers' perspectives, which may not invariably align with the multifarious preferences of the broader customer base. Thus, while the study provides valuable insights, its findings must be interpreted judiciously in the broader context of the Indian two-wheeler landscape.

Looking ahead, further research endeavors hold the promise of augmenting our comprehension of this dynamic domain. Surveys targeting actual customers can offer corroborative evidence and provide a holistic perspective on the factors driving two-wheeler purchases. Exploring regional variations and evolving market trends can furnish a more comprehensive understanding, allowing industry players to tailor their strategies with precision.

In sum, this research illuminates the intricacies of the Indian two-wheeler market, affording valuable guidance to industry stakeholders aiming to navigate the diverse terrain of consumer preferences. It underscores the imperative for market players to remain agile, responsive, and attuned to the ever-evolving dynamics of this vibrant and competitive sector.

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## ELEVATING THE TWO-WHEELER EXPERIENCE: FACTORS SHAPING PURCHASE CHOICES AND POST-PURCHASE SATISFACTION

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### ABSTRACT

This study delves into the intricacies of the two-wheeler market, seeking to elevate the understanding of the multifaceted process involved in purchasing these versatile vehicles. The research unfolds in two dimensions: first, it endeavours to unearth the pivotal factors that sway consumers when making the pivotal decision to acquire a two-wheeler. Second, it rigorously evaluates the degree of post-purchase contentment experienced by owners in relation to the specific factors they considered during their decision-making journey.

Through a comprehensive examination of factors such as brand image, company image, price, mileage, and driving comfort, this research aims to dissect their individual and collective impacts on consumers' purchase decisions. By assessing post-purchase satisfaction levels in these areas, it endeavours to uncover the intricate connections between factor satisfaction and overall contentment with the chosen two-wheeler.

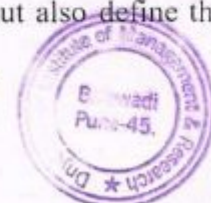
Furthermore, the study explores potential disparities in factor satisfaction across diverse demographic segments, providing valuable insights into variations in consumer preferences. Ultimately, the research culminates in actionable recommendations for manufacturers and dealerships, equipping them with strategies to enhance consumer satisfaction and effectively address the critical factors that significantly influence purchase decisions. This study is poised to illuminate the path toward elevated two-wheeler purchasing experiences and foster stronger consumer-brand relationships within the dynamic automotive market.

Our study employs a comprehensive research framework, combining quantitative and qualitative methodologies, to tease apart the key drivers of two-wheeler purchase decisions. By closely examining elements such as brand image, company reputation, price sensitivity, mileage expectations, and the quest for driving comfort, we aim to provide a nuanced understanding of what truly matters to consumers.

Furthermore, we assess the correlation between these factors and post-purchase satisfaction, recognizing that a fulfilling ownership experience is the ultimate litmus test of a well-informed choice. By charting the course from decision-making to real-world experiences, we hope to illuminate the path toward elevating the two-wheeler experience for consumers and industry stakeholders alike.

The research presents the results of our research, offering insights, recommendations, and a deeper appreciation of the factors that not only drive purchase decisions but also define the two-wheeler journey for riders around the world.

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## INTRODUCTION

The global two-wheeler industry has experienced unprecedented growth and transformation, and at the epicentre of this seismic shift stands the Indian two-wheeler market. India, with its vast and diverse landscape, has emerged as one of the largest and most influential markets for two-wheelers worldwide. The nation's love affair with these nimble machines extends beyond mere utility; it embodies a cultural phenomenon, symbolizing freedom, affordability, and accessibility for millions of its citizens.

The Indian two-wheeler industry has a storied history, dating back to the early 1950s when iconic names like Royal Enfield and Bajaj first started rolling out motorcycles on Indian roads. Since then, the industry has undergone remarkable transformations, adapting to changing consumer preferences, regulatory shifts, and technological advancements.

In contemporary times, the Indian two-wheeler market has evolved into a dynamic ecosystem, characterized by a kaleidoscope of offerings. From the streets of bustling metropolitan cities to the remote corners of rural India, two-wheelers have become the lifeblood of mobility. They navigate congested traffic with ease, offer respite from skyrocketing fuel prices, and serve as a symbol of empowerment for millions of commuters, students, and enthusiasts.

The industry is home to a diverse range of players, from domestic giants such as Hero MotoCorp, Bajaj Auto, and TVS Motor Company, to international titans like Honda, Suzuki, and Yamaha. Each of these manufacturers brings its unique blend of technology, design, and marketing prowess to cater to the eclectic tastes and needs of the Indian consumer.

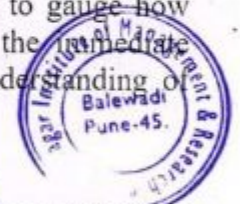
One cannot overstate the significance of the two-wheeler industry in India's economic tapestry. It is not only a major contributor to the country's GDP but also a vital source of employment, with numerous manufacturing units and dealerships dotting the landscape. Moreover, it plays a pivotal role in fostering micro-entrepreneurship through last-mile delivery services and ride-sharing platforms.

## NEED OF THE STUDY

The study on factors influencing two-wheeler purchase decisions and post-purchase satisfaction in the Indian context is imperative due to the sheer size and rapid growth of the Indian two-wheeler market. This market serves as a pivotal component of the Indian economy, with diverse consumer preferences, income levels, and regional dynamics. Understanding the nuanced factors that shape consumers' choices is vital for manufacturers, dealerships, and policymakers to adapt and thrive in this dynamic landscape. Furthermore, as the industry undergoes technological and regulatory transformations, such as the rise of electric two-wheelers and stringent emission standards, it becomes essential to gauge how these changes impact consumer behaviour. This study not only addresses the immediate needs of industry competitiveness but also contributes to the academic understanding of consumer behavior in a culturally rich and economically significant context.

## LITERATURE REVIEW

(Kathiravana, C., , Panchanathama, N., , & Anushan, S. , 2010) explores the relationship between brand image, brand attitude, and perceived quality in the context of two-wheeler purchase decisions. It identifies influential variables that guide consumers in choosing durable products and suggests a strong relationship between brand image and consumer preferences.



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(Rajini G. & A. Poornima, 2011) focuses on the demographic profile and factors affecting the purchasing decisions of two-wheeler customers in Vellore. The study found that affordability, comfort, customer care, and external influences were significant factors influencing customers' choices.

(Shaikh, 2012) focuses on identifying preferred two-wheeler manufacturing companies, popular brands, and consumer preferences in the two-wheeler market. It highlights the importance of understanding consumer needs and desires and suggests that Hero Motor Corp. and Honda Motorcycles are the most preferred manufacturers.

(M.Gomathi & R.Gomathi, 2013) examined customer preferences and satisfaction levels among two-wheeler users. The research focused on variables affecting customer loyalty, such as mileage, features, pickup, speed, and resale value. Sampling 400 users and employing statistical tools like Chi-square and factor analysis, the study found that respondents were generally satisfied with their two-wheelers and the dealer's overall performance.

(Dr. Duggani Yuvaraju & Prof. S. Durga Rao, 2014) founded that television was the most influential medium for customer awareness and factors like quality service and brand image were essential in purchase decisions. The study conducted in Tirupathi, involved Honda two-wheeler users. Satisfaction levels varied across factors, with mileage and performance being highly satisfying, while price and design were less satisfying.

(Dr.K. Lakshmi Priya, 2016) explores factors influencing customer preference for a specific two-wheeler brand. It highlights the importance of availability, product quality, and customer expectations. Respondents expressed a positive brand image for Honda bikes, leading to high

### OBJECTIVES OF THE STUDY

1. To identify the factors that significantly influence consumers when making decisions to purchase two-wheelers.
2. To measure and evaluate the level of satisfaction that two-wheeler owners regarding the factors they considered during the purchase decision.
3. To evaluate whether consumers' expectations align with their post-purchase experiences in terms of brand image, company image, price, mileage, and driving comfort.

### METHODOLOGY OF THE STUDY

The data is collected from both primary and secondary sources:

**Primary data:** The two-wheeler customers were the set of respondents for the study who provided information related to their demographic profile, the purchase pattern towards buying a two-wheeler. The research instrument was developed which inculcated the 13 closed-ended questions and the responses were collected from 755 customers in two-wheeler dealer outlets, Pune. Their perceptions have been collected, tabulated and analysed.

**Secondary Data:** Secondary data has been collected from various sources such as Books on National and International Research Journals, Magazines and Periodicals, Newspapers and two-wheeler company annual reports and websites.

**Study Design:** Descriptive

**Sampling technique:** Convenience Non Probability Sampling





Sample size: 755

Study area: Pune

Data Collection Instrument: Structured Questionnaire

**SCOPE OF THE STUDY**

This study is focused on two-wheeler customers residing in Pune city and aims to understand the factors influencing their purchase decisions and post-purchase satisfaction. It specifically considers seven major two-wheeler companies operating in Pune, focusing on motorcycles and scooterettes. The study gathers primary data from first-hand two-wheeler users.

**DATA ANALYSIS**

**1. DEMOGRAPHIC PROFILE OF THE RESPONDENTS**

Within the framework of this study, the personal characteristics of the 755 respondents assume a pivotal role in shaping their responses and articulating their perspectives. These individual attributes encompass age, income, gender, educational qualifications, occupation, annual family income, and family size. The thorough examination and presentation of these demographic variables yield invaluable insights into the intricate interplay of these factors and how they collectively affect the purchase decisions of the respondents.

**TABLE 1 : DEMOGRAPHIC PROFILE**

<b>Gender</b>	Male	632 (83.7%)	Female	123 (16.3%)							
<b>Marital Status</b>	Single	486 (64.4%)	Married	269 (35.6%)							
<b>Age (in yrs)</b>	18 -21	106 (14.0%)	21-25	305 (40.4%)	25-35	242 (32.1%)	35-50	83 (11.0%)	50 and above	19 (2.5%)	
<b>Qualification</b>	High School	15	SSC	43	HS C	95	Graduation	387	PG	215	
<b>Occupation</b>	Student	241	Professional/Business	195	Salaried	17	Retired	4			

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<b>Annual Family Income (Rs.)</b>	Less than 1,50,000	23	1,50,000 to 2,50,000	175	2,50,000 to 5,00,000	253	5,00,000 and 10,00,000	179	10,00,000 and above	125
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The respondents were from Pune city and they differed in demographic aspects such as Income group, Educational qualifications, Occupation. Of the total sample of 755 respondents, 632 (83.7%) were males and remaining 123 (16.3%) were females. There were 33.2% males belonging the age between 21-25 yrs. and 27.3% males belonging the age between 25 - 35 yrs. There were 7.2% females belonging to the age between 21-25 yrs. and 4.8% females belonging the age between 25-35 yrs. There were only 19 respondents (16M, 3F) who were above the age of 50 yrs. and 11% were in age group of 35-50 yrs. consisting of 74 (9.8%) males and 9 (1.2%) females. It has been observed that the 486 number of the respondents (64%) were married and remaining (35.6%) were unmarried. Majority of the respondents were married since the average respondents were from late adolescent age group. From the above table it is inferred that the 39.5% of the respondents are salaried, 31.9% of respondents are students, 25.80% of the respondents are professionals or businessmen, 2.3% of the respondents are housewife and remaining 0.5% of the respondent are retired. It can be inferred that the highest group using two wheeler is the one who belong to salaried class. It has been observed that 144 (19.1%) respondents were found to be graduates with an earnings between Rs. 2.5 – 5 lacs as annual household income. There were only 11 (1.1%) respondents who had low educational qualification as well as low income (HSC and below HSC with less than Rs. 1.5 Lacs annual income). So, it may be concluded that majority of the two wheeler respondents are well educated and highly qualified and the annual average income household income is above Rs. 1.5 Lacs.

## 2. IMPORTANCE OF FACTORS IN PURCHASE DECISION

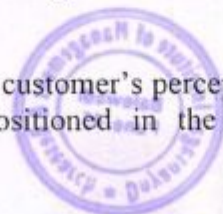
The respondents were also requested to rate identified factors (Brand Image, Company Image, Price, Mileage, Driving Comfort, etc.) that had a consideration on their purchase decision. The respondents were requested to rank these factors on a five point scale, where 1 meant not at all important and 5 meant extremely important. Further this data was analysed to find any correlations between the demographic variables and the affecting variables.

The researcher has used different parameters to analyse and establish association between different variables. These different parameters are taken considering their role in the buying pattern and sales practices of the two wheeler companies. The parameters are Age Gender, Occupation and Annual Family Income.

When it comes to choosing one product versus another, customers whether consciously or subconsciously assess a variety of factors. The customers were also enquired about the degree of importance they give to various factors of attraction compelling them for purchase decisions. The information in this regard is shown in Tables below.

### 2.1 BRAND IMAGE

Brand image is nothing but the customer's perception about the product. It is the approach in which a specific brand is positioned in the market. Brand image is nothing but an







organization's character. The brand image is purely an impression of the brand created over a timeframe in the consumer's mindset by the two wheeler companies.

**TABLE 2: RATING OF BRAND IMAGE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	24	3.2
2	12	1.6
3	57	7.5
4	244	32.3
Extremely important	418	55.4
Total	755	100.0

This image of a brand is ultimately a deciding factor that determines the product sales. From this point of view when one analyses the responses, it is noticed that 87.7% of respondents considers brand image as important determinant of buying decision.

## 2.2 COMPANY IMAGE

The image of a company has an enormous effect as it signals the brains of the customer while considering the purchase of a two wheeler. The reputation of a company goes before it in the market in this manner drawing in customers just by the name. Consequently it's essential that each company guarantees that the company image is constantly connected with positive feelings in the brains of the customers.

**TABLE 3: RATING OF COMPANY IMAGE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	22	2.9
2	79	10.5
3	354	46.9
4	298	39.5
Extremely important	2	0.3
Total	755	100.0

he data presented in the above table indicates that company image is rated important as a basic consideration for buying a particular vehicle. 39.8% of the respondents have rated company image as important factor. The reputation of a company is essential to its survival. The trust and confidence of the consumer can have a direct and profound effect on a company's image.

## 2.3 PRICE

Price is the first consideration, for initial affordability for a customer. When buying a two wheeler, many customers determine the value that a vehicle offers by comparing the price with the features and benefits

**TABLE 4: RATING OF PRICE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	41	5.4
2	108	14.3
3	256	33.9
4	348	46.1





Extremely important	2	0.3
Total	755	100.0

As per the responses Price is important. The information presented above indicates that, 46.4% of respondents have rated Price as an important factor when it comes to purchase decision towards a particular brand. Thus, Price is certainly the most significant and important influencing factor for customer during the basic decision making process.

#### 2.4 FUEL ECONOMY

With increasing petrol costs, the mileage component is an influencing factor while buying a two wheeler. The main selling point of any two wheeled vehicle is the fuel economy that it offers to the customer. A smaller-sized engine capacity two wheeler will give great fuel economy whereas a bigger engine capacity will have more power and will get low fuel economy. Mileage of a two wheeler may differ from consumer to consumer due to the vehicle riding method, petrol used and addition of extra accessories or custom made modifications inside the two wheeler.

**TABLE 5: RATING OF FUEL ECONOMY/MILEAGE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	43	5.7
2	89	11.8
3	286	37.9
4	335	44.4
Extremely important	2	0.3
Total	755	100.0

In this study, it is observed that fuel economy emerged as the important factor while making the purchase decision. In purchasing a two wheeler vehicle, 44.7% respondents have rated fuel economy important factor while making the purchase decision.

#### 2.5 DRIVING COMFORT

Comfort is the factor which while driving a two wheeler makes the journey a pleasure and not a hardship. An ergonomically designed seat assumes a significant part to improve the driving solace. Self-start eases customers from the pressure of kicking and thus adding to the driving solace.

**TABLE 6: RATING OF DRIVING COMFORT AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	38	5.0
2	114	15.1
3	317	42.0
4	285	37.7
Extremely important	1	.1
Total	755	100.0

In this study, it is observed that driving comfort is an important factor considered while purchasing. In purchasing a two wheeler vehicle, 79% respondents have rated driving comfort as an important factor while making the purchase decision. Neutral response is from





42% of the respondents where as 20.1% respondents have rated driving comfort as not important factor while considering a two wheeler for purchase.

## 2.6 SAFETY

TABLE 7: RATING OF SAFETY AS AN INFLUENCING FACTOR

	Frequency	Percent
Not at all important	35	4.6
2	91	12.1
3	292	38.7
4	335	44.4
Extremely important	2	.3
Total	755	100.0

44.4% customers have rated that safety features as the important factor considered while preferring a two wheeler and 38.7% customers have given neutral response to the level of importance for safety features considered while preferring a two wheeler. Thus, it is inferred that majority of the customers agreed that they give importance to safety features while preferring a two wheeler but they also consider other factors like Price, Mileage and Brand Image more important to Safety.

## 2.7 PICK UP

Pick up means power, speed, acceleration and brakes of the two wheeler. Today, many people, mostly youngsters are fascinated by the word "cc". The customer believes that higher the cc, better the two wheeler is. Two wheeler with higher cc (cubic centimeter) are good as they produce more pick up and power and go faster. The two wheeler has consistently increased the power output of its engines while emphasizing fuel economy

TABLE 8: RATING OF PICK UP AS AN INFLUENCING FACTOR

	Frequency	Percent
Not at all important	44	5.8
2	122	16.2
3	293	38.8
4	294	38.9
Extremely important	2	.3
Total	755	100.0

Pick up is the factor considered while purchasing a two wheeler. Thus, it is inferred that 38.9% of the customers feel that pick up is an important factor whereas 38.8% respondents are neutral to their response. 22% of the respondents feel pick up as not so important factor to consider while purchasing a two wheeler.

## 2.8 COLOUR

Colours play an important role in conscious and unconscious purchasing decisions. Colours focus on the mood of the era. The vehicle product available in the market comes in a wide variety of colours that is eye catching and trendy. The colours are eclectic and attract customers.

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**TABLE 9: RATING OF COLOUR AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	78	10.3
2	146	19.3
3	317	42.0
4	213	28.2
Extremely important	1	.1
Total	755	100.0

Colour of the two wheeler is the factor considered while purchasing a two wheeler. But as per the information presented in the Figure, it is inferred that majority of the customers 29.6% have not rated colour as an important factor whereas 42% respondents are neutral to their response. Hence Colour is not an extremely important factor while deciding the two wheeler purchase

## 2.9 LATEST TECHNOLOGY

New technologies and trends are driven by changing customer demands as well as government regulations regarding safety and environmental concerns. India is the most competitive two-wheeler market in the world. Here, technologies get outdated in a short span of time. To stay in the quest, all the major two-wheeler companies give their best to update technologies as per the consumers demand.

**TABLE 10: RATING OF LATEST TECHNOLOGY AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	38	5.0
2	123	16.3
3	292	38.7
4	301	39.9
Extremely important	1	.1
Total	755	100.0

From the data presented above it indicates that the trend is more towards neutral reaction. 38.7% of the respondents have rated latest technology as neutral as non-affecting factor while considering the purchase.

## 2.10 RELIABILITY

With recent trends in two wheeler industry it has shown an increasing importance of reliability as a influencing factor while buying. Customers look at the two wheeler product as a long term investment which should run well with minimum setbacks. Reliability means different things to different two wheeler buyers everything from quality to fuel efficiency to utility.

**TABLE 11: RATING OF RELIABILITY AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	52	6.9
2	145	19.2
3	558	44.1

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4	224	29.7
Extremely important	1	.1
Total	755	100.0

From the information presented in table above, it clearly indicates 26.1% of the respondent have rated reliability factor as not so important factor the customer considers while making purchase decision. 44.1% of the respondents have reacted neutrally towards reliability factor.

### 2.11 INTERNAL SPACE / STORAGE SPACE

A motorcycle is compact but two wheeler companies have designed storage space in scooterettes segment which are mainly used to keep the helmet, raincoats, documents or small bags. This feature is especially attractive to women riders who can utilize this space for their purses and phones also. Storage space is required by users as small closet for valuables like documents and tool kits.

**TABLE 12: RATING OF INTERNAL SPACE / STORAGE SPACE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	140	18.5
2	183	24.2
3	261	34.6
4	167	22.1
Extremely important	4	.5
Total	755	100.0

As 42.7% of the respondents feel internal storage space is not an important factor while deciding the two wheeler purchase. As there are other factors the customers give importance while deciding the purchase like brand image, price, fuel economy.

### 2.12 STYLE AND AESTHETICS

Today the consumers want a well-designed product to match their style. Many customers go by style and aesthetics of a two wheeler. Aesthetics and Style plays an important role in purchase decision of the customer. From this point of view, customers responses to style and aesthetics has studied by the researcher.

**TABLE 13: RATING OF STYLE AND AESTHETICS AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	57	7.5
2	118	15.6
3	317	42.0
4	262	34.7
Extremely important	1	.1
Total	755	100.0

From the data presented above, a majority 34.8% of respondents have considered style and aesthetics as an important factor while deciding to purchase. Style and Aesthetics has been used by two wheeler companies for branding and as a differentiating factor in the competitive two wheeler market. Style and Aesthetics are important for creating a positive user





experience. There are number of two wheeler models available in the market and it is important that the style and aesthetics of the two wheeler are as per the taste of customers. Style and Aesthetics enhances the visual appeal and additionally creates the sensory experience.

### 2.13 MAINTENANCE COST

Servicing and maintenance of a two wheeler is essential for its proper functioning. This factor weighs heavily in making an informed buying decision for a suitable two-wheeler as it has a direct bearing on the running cost of the two wheeler. To increase the durability of a two wheeler the customer should go for servicing of two wheeler at regular intervals.

**TABLE 14: RATING OF MAINTENANCE COST AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	51	6.8
2	126	16.7
3	340	45.0
4	237	31.4
Extremely important	1	.1
Total	755	100.0

To what extent is the importance of maintenance cost to the respondents is represented in the aboveFigure. The data indicates that maintenance cost (31.5%) is an important factor while deciding the two wheeler purchase, but it is not the principle decision making input of buying as given by the respondents.

### 2.14 RESALE VALUE

Even before buying a bike, you have to consider its resale value. Before purchasing a bike, you need to be able to answer these questions. "How long will I drive this bike?" and "What is the general popularity of the bike you chose to buy?" Answers to these questions help us determine the resale value when we trade up. However, our diligence in taking care of the bike is an important factor that decides the resale value. A vehicle which is still in production (at the time of resale) will fetch a higher value. In addition, factors like maintenance, service center network and mileage clocked can make or break a deal.

**TABLE 15: RATING OF RESALE VALUE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	78	10.3
2	178	23.6
3	301	39.9
4	194	25.7
Extremely important	4	.5
Total	755	100.0

The data indicates that the customers do feel the importance of resale value however it appears that buying decision is not much affected by the factor - Resale value. Other factors like Brand, Company Image, Mileage, Price and Driving Comfort are considered the buying considerations.



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### 2.15 SERVICE NETWORK

Geographic distribution of service centers is important in terms of providing accessibility to the customer. The two wheeler company selected by the customer should have an extensive network of service centers providing servicing and easy availability of spare parts.

**TABLE 16: RATING OF SERVICE NETWORK AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	56	7.4
2	128	17.0
3	328	43.4
4	241	31.9
Extremely important	2	.3
Total	755	100.0

Each and every two wheeler company has a the service network for service facilities that need to be extended to the customer after purchase. Servicing the two wheelers after a customer purchases is important to the two wheeler users. The data indicates the importance but does not influence the buying behaviour to a great extent.

### 2.16 ACCESSORIES

One of the greatest things about owning a two wheeler is the ability to customize it to match your riding needs and personalities. Accessories add to the style and safety of the two wheeler.

**TABLE 17: RATING OF ACCESSORIES AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	56	7.4
2	170	22.5
3	324	42.9
4	204	27.0
Extremely important	1	.1
Total	755	100.0

From the above data it specifies the importance of accessories however it appears that the buying behaviour is not much affected by the factor – Accessories.

### 3.1 CUSTOMER SATISFACTION WITH REGARDS TO BRAND IMAGE

**TABLE 18: RATING OF BRAND IMAGE AS PER CUSTOMER SATISFACTION**

	Frequency	Percent
Highly dissatisfied	9	1.2
Dissatisfied	8	1.1
Neither satisfied nor dissatisfied	78	10.3
Satisfied	368	48.7
Highly satisfied	292	38.7
Total	755	100.0

From the table above it depicts that 87.4% of respondents are satisfied with the brand image after purchasing the two wheeler. It can be concluded that majority of the customers who





rated brand images as an important factor while purchase consideration are satisfied with the brand image.

### 3.2 CUSTOMER SATISFACTION WITH REGARDS TO COMPANY IMAGE

TABLE 19: RATING OF COMPANY IMAGE AS PER CUSTOMER SATISFACTION

	Frequency	Percent
Highly dissatisfied	15	2.0
Dissatisfied	14	1.9
Neither satisfied nor dissatisfied	110	14.6
Satisfied	396	52.5
Highly satisfied	220	29.1
Total	755	100.0

From the above table it depicts that 71.6% of respondents are satisfied with the company image after purchasing the two wheeler.

### 3.3 CUSTOMER SATISFACTION WITH REGARDS TO PRICE

TABLE 20: RATING OF PRICE WITH REGARDS TO CUSTOMER SATISFACTION

	Frequency	Percent
Highly dissatisfied	13	1.7
Dissatisfied	22	2.9
Neither satisfied nor dissatisfied	149	19.7
Satisfied	372	49.3
Highly satisfied	199	26.4
Total	755	100.0

The above table shows 49.3% are satisfied with the price and 26.4% of respondents are highly satisfied with the price of the two wheeler purchased.

### 3.4 CUSTOMER SATISFACTION WITH REGARDS TO FUEL ECONOMY

TABLE 21: RATING OF FUEL ECONOMY/MILEAGE WITH REGARDS TO CUSTOMER SATISFACTION

	Frequency	Percent
Highly dissatisfied	11	1.5
Dissatisfied	45	6.0
Neither satisfied nor dissatisfied	150	19.9
Satisfied	342	45.3
Highly satisfied	207	27.4
Total	755	100.0

As the table above depicts 72.7% of the respondents were satisfied with the fuel economy provided by the two wheeler owned.

  
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### 3.5 CUSTOMER SATISFACTION WITH REGARDS TO DRIVING COMFORT

**TABLE 22: RATING OF CUSTOMER SATISFACTION WITH REGARDS TO DRIVING COMFORT**

	Frequency	Percent
Highly dissatisfied	12	1.6
Dissatisfied	30	4.0
Neither satisfied nor dissatisfied	138	18.3
Satisfied	361	47.8
Highly satisfied	214	28.3
Total	755	100.0

From the table presented above it reflects that 76.1% respondents are satisfied with the important factor driving comfort. In this study, it is observed that driving comfort is an important factor considered while purchasing and 37.7% respondents have rated driving comfort as an important factor. 42% of the respondents were with neutral response towards importance of comfort and may be the customers have not considered its importance level while purchasing and after purchasing may be the customer have experienced the comfort level and are satisfied after purchase of the two wheeler.

### 4. MEAN GAP ANALYSIS

The researcher tried to identify the mean gap for the 16 factors influencing the purchase decision with the level of importance in consideration at the time of purchase and level of satisfaction while using the two wheeler.

**TABLE 23: MEAN GAP ANALYSIS PRODUCT RELATED INFLUENCING FACTOR**

Parameters	Mean of Level of importance in consideration at the time of purchase	Mean of Level of satisfaction while using	Gap score
Brand Image	4.35	4.23	- 0.12
Company Image	3.24	4.05	0.81
Price	3.21	3.96	0.75
Fuel Economy/ Mileage	3.22	3.91	0.69
Driving Comfort	3.13	3.97	0.84
Safety	3.24	3.92	0.68
Pick up	3.12	3.94	0.82
Colour	2.88	3.88	1.00
Latest Technology	3.14	3.85	0.71
Reliability	2.97	3.76	0.79
Internal Space / storage space	2.62	3.50	0.88
Style and Aesthetics	3.04	3.89	0.85
Maintenance Cost	3.01	3.73	0.72
Resale Value	2.83	3.52	0.69
Service Network	3.01	3.77	0.76
Accessories	2.90	3.76	0.86







The table presents a comprehensive Mean Gap Analysis of product-related factors influencing the purchase decision and the level of satisfaction while using two-wheelers. This analysis offers valuable insights into the alignment between customer expectations during the purchase process and their actual satisfaction while using the product.

Notably, the majority of factors demonstrate a positive gap score, indicating that customers are not only satisfied but also find the product-related factors to be even more important than they initially considered during their purchase decision. This suggests that the two-wheeler companies have successfully met or exceeded customer expectations in these areas.

However, the brand image factor stands out with a negative gap score of -0.12. While customers still express satisfaction with this aspect, the slightly lower rating suggests that there may be room for improvement in enhancing the brand image to better align with customer expectations.

Overall, this analysis highlights the effectiveness of the sales practices adopted by two-wheeler companies. It underscores their ability to meet or surpass customer expectations in most product-related factors, thereby contributing to customer satisfaction and loyalty. Nevertheless, the findings also indicate that continuous efforts to enhance brand image can further strengthen the customer-company relationship and solidify the brand's position in the market.

### SUGGESTIONS

Following the comprehensive research on factors influencing two-wheeler purchase decisions and post-purchase satisfaction, few suggestions:

- Manufacturers: Prioritize building brand image, offer competitive pricing, and invest in R&D for enhanced features. Tailor strategies to demographics and effectively communicate brand values and features.
- Dealerships: Invest in staff training, create positive showroom experiences, and prioritize customer service.

### CONCLUSION

This study has provided valuable insights into the factors influencing two-wheeler purchase decisions and post-purchase satisfaction among consumers in Pune city. Through a comprehensive analysis of demographic variables and the mean gap between perceived importance during purchase and satisfaction while using two-wheelers, it is evident that certain factors significantly impact decision-making processes, while others play a crucial role in shaping overall satisfaction. These findings offer essential guidance for manufacturers, dealerships, and policymakers in the two-wheeler industry, emphasizing the importance of aligning customer expectations with real-world experiences to enhance consumer satisfaction and loyalty.

In conclusion, our study rigorously examined and gained a deeper understanding of the factors influencing two-wheeler purchase decisions and post-purchase satisfaction among diverse consumer segments in Pune city.

  
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# UNVEILING THE KEY FACTORS SHAPING TWO-WHEELER SALES PROCESS DESIGN: INSIGHTS FROM DEALER MANAGERS

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## ABSTRACT

This study delves into the critical factors that mold the design of the sales process from the perspective of two-wheeler dealer managers. Using a rating scale ranging from 1 to 5, where 1 signifies the lowest importance and 5 signifies the highest importance, dealer managers provide their insights into various elements influencing the sales process. These elements include layout and interior, location, product display, attractive discount offers, helpful and courteous sales staff, availability of product range, exchange offers, ease and efficiency of the sales procedure, finance facility, test ride availability, and vehicle delivery commitments.

The research reveals the significance attached to each of these factors in the eyes of dealer managers and offers valuable insights into their role in shaping the sales process. By understanding the priorities and preferences of dealer managers, this study contributes to enhancing the effectiveness of sales processes within the two-wheeler industry. This research aims to shed light on the critical factors influencing the design of the sales process in the two-wheeler industry as perceived by dealer managers, ultimately contributing to the enhancement of sales practices and customer experiences in this highly competitive market.

It provides manufacturers and marketers with essential guidance on optimizing their sales strategies in a competitive market, where attention to these factors can make all the difference in influencing consumer decisions.

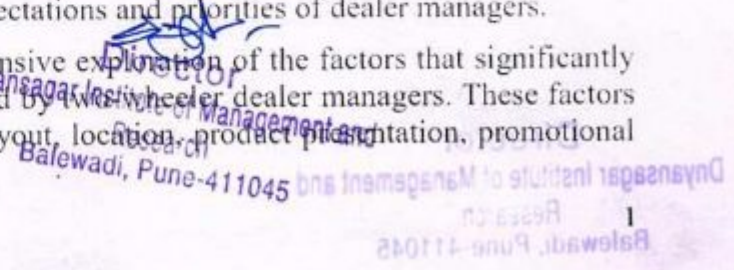
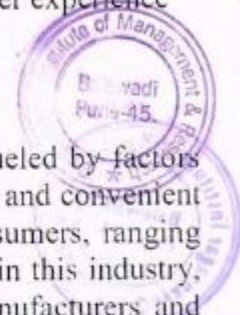
**KEYWORDS:** Two-wheeler industry, Sales process design, Dealer managers, Customer experience  
Sales strategy optimization

## INTRODUCTION

The Indian two-wheeler industry has witnessed remarkable growth over the years, fueled by factors such as increased urbanization, rising disposable incomes, and the need for affordable and convenient personal transportation. This burgeoning market offers a plethora of choices to consumers, ranging from motorcycles to scooters, catering to diverse preferences and requirements. Within this industry, the role of dealer managers is paramount, as they serve as the bridge between manufacturers and customers.

Dealer managers are responsible for orchestrating the sales process, from showcasing the latest models in their showrooms to guiding customers through the decision-making journey. Their understanding of what drives customers' choices and influences their decisions is instrumental in shaping the sales strategies and practices employed by two-wheeler manufacturers. To excel in this competitive market, manufacturers must align their offerings with the expectations and priorities of dealer managers.

In this context, this research embarks on a comprehensive exploration of the factors that significantly influence the design of the sales process, as perceived by two-wheeler dealer managers. These factors encompass a wide spectrum, including showroom layout, location, product presentation, promotional







offers, and the demeanor of sales staff, product range, exchange programs, sales efficiency, financing options, test ride availability, and delivery commitments.

### NEED OF THE STUDY

The need for this study can be summarized as follows:

1. **Industry Competitiveness:** The two-wheeler industry is highly competitive, and understanding the key factors that influence the sales process is essential to gain a competitive edge.
2. **Dealer Manager Perspectives:** Dealer managers play a pivotal role in sales operations, and their insights are valuable for improving sales practices and processes.
3. **Customer Experience:** Enhancing the customer experience is crucial in a competitive market, and this study aims to identify the factors that impact it.
4. **Manufacturer and Marketer Guidance:** Manufacturers and marketers in the two-wheeler industry can benefit from the insights provided by this research to optimize their sales strategies.
5. **Consumer Decision-Making:** The study recognizes that attention to specific factors can influence consumer decisions, which is of great importance for businesses in this industry.

### LITERATURE REVIEW

(Shane Baxendale, 2015) introduces an approach to assess the impact of different marketing touch points (e.g., brand advertising, retailer advertising, in-store communication) on brand consideration. It highlights the importance of in-store communication and peer observation, while also emphasizing the role of emotional response and frequency for better resource allocation in marketing.

(Mohd. Talha Khan, 2015) applied the SERVQUAL model to assess service quality in the two-wheeler automobile industry, specifically for Hero, Bajaj, and Honda in Lucknow, Moradabad, and Noida. The findings revealed that Bajaj had the highest perceived service quality, followed by Hero and Honda. Notably, there was a perception-expectation gap for Hero and Honda users but not for Bajaj customers.

(Pansari, 2017) study offers a framework for customer engagement (CE) based on satisfaction and emotional connection. It explores the components, antecedents, and outcomes of CE, along with factors that influence these links. The study also provides strategies for improving customer engagement and enhancing firm performance.

(Sriyogi, 2017) uses AHP and TOPSIS to assess the factors influencing Indian customers' two-wheeler purchase decisions. The critical factors include high pick-up, fuel efficiency, spare parts pricing, unique design, and gear-shifting ease. Furthermore, the study identifies popular two-wheeler models based on price, capacity, horsepower, and weight, providing essential insights into Indian two-wheeler buyers' preferences.

### OBJECTIVES

The primary objectives of this study are as follows:

1. To assess the perceptions and opinions of two-wheeler dealer managers regarding the factors that significantly influence the design of the sales process.
2. To gain insights into the dealer managers' perspectives on the role of elements such as layout and interior, location, product display, attractive discount offers, helpful and courteous sales staff, availability of product range, exchange offers, ease and efficiency of the sales procedure.





finance facility, test ride availability, and vehicle delivery commitments in shaping the sales process.

### METHODOLOGY OF THE STUDY

The research methodology employed in this study encompasses several key elements:

- 1. Research Design:** This study adopts a quantitative research design, utilizing a rating scale ranging from 1 to 5. Dealer managers provide their evaluations of various factors that influence the sales process within the two-wheeler industry.
- 2. Data Collection:** In this study, data collection was carried out through structured interviews involving 74 two-wheeler dealer managers in Pune city. These managers were selected to represent dealerships associated with well-known two-wheeler manufacturers, which include Hero Moto Corp, Bajaj Auto Ltd., Honda Motorcycle and Scooters India Pvt. Ltd., Yamaha Motors India, TVS Motors Company Limited, Mahindra Two Wheelers Limited, and Suzuki Motorcycle India Pvt. Ltd.
- 3. Sampling:** The study selects a sample of dealer managers from various two-wheeler dealerships to ensure diversity and representation within the industry. The research methodology described indicates that the study used a census sampling technique to include all 85 identified two-wheeler dealer managers in Pune city. Nevertheless, data was obtained from 74 respondents, as 11 managers declined to provide business information.
- 4. Data Analysis:** Quantitative data analysis methods are employed to calculate the average ratings for each factor, revealing the relative importance of these elements as perceived by dealer managers.

### SCOPE OF THE STUDY

This study has a narrow focus on the two-wheeler industry, emphasizing the perspectives of dealer managers. It assesses the importance of various factors influencing the sales process, such as layout, location, staff courtesy, discounts, and more, using a rating scale. The main objective is to provide valuable insights to enhance sales practices and customer experiences in this highly competitive market. It also seeks to guide manufacturers and marketers in optimizing their strategies and recognizes the pivotal role these factors play in influencing consumer decisions.

### RESULT & ANALYSIS

#### 1. PROFILE OF DEALERS

In the pursuit of understanding the dynamics of the two-wheeler market in Pune city, the researcher engaged with a total of 85 two-wheeler dealers. Out of this comprehensive sample, valuable insights were successfully gathered from 74 two-wheeler dealers in Pune city.

The distribution of these dealers across various two-wheeler companies is outlined in table below:

**TABLE 1: NO OF DEALERS OF TWO WHEELER COMPANY**

	Frequency	Percent
Bajaj	11	14.9
Hero MotoCorp	12	16.2
TVS	14	18.9
Yamaha	8	10.8
Honda	15	20.2
Suzuki	6	8.2
Mahindra & Mahindra	10	10.8



Total	74	100.0
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From the above data, it becomes evident that the research has successfully encompassed a diverse range of two-wheeler companies. Honda emerges as the leading company represented among the dealers, commanding a significant share of 20.2%. TVS and Hero MotoCorp closely follow with 18.9% and 16.2% respectively. Bajaj secures 14.9%, while Mahindra & Mahindra and Yamaha each account for 10.8%. Suzuki, though represented by a smaller number, contributes to the research with 8.2%.

This diverse profile of dealers ensures a comprehensive and holistic understanding of the two-wheeler market in Pune city, providing valuable insights into the preferences and perceptions of dealers associated with prominent two-wheeler manufacturers.

## 2. TWO-WHEELER DEALER MANAGERS' PERSPECTIVES ON PRE-SALES FACTORS

Consumer psychology varies and is different for different classes of consumers. How the consumer responds to a sales process often depends on type of target consumers, their preference, choices and values. Hence the researcher had established eleven different parameters as major factors on the basis of importance while designing the sales process. The rating of these parameters from managers' point of view is presented in table

### A. LAYOUT AND INTERIOR

Two wheeler dealers sell dreams. The layout and interior of the dealership removes the physical and psychological barriers between customers and dream two wheeler vehicle.

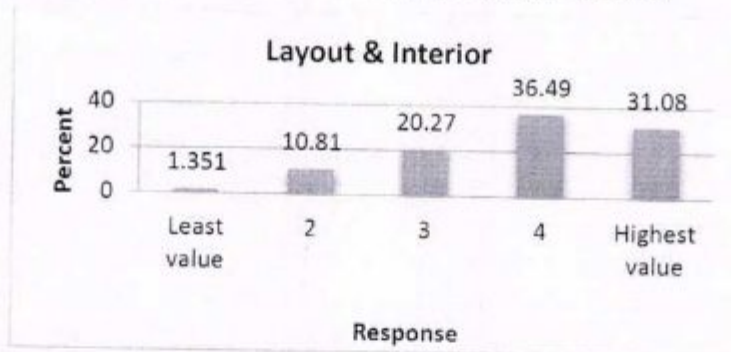
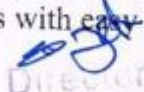


Figure 1: Rating by the Manager regarding layout and interior of the dealership

The data presented in the figure highlights the crucial role of dealership layout and interior, with 67.6% of dealers emphasizing its significance. This underscores the importance of maintaining a well-designed and appealing physical environment for two-wheeler dealerships. Such an environment not only attracts customers but also ensures their comfort and satisfaction during initial interactions with the brand and its products. Therefore, two-wheeler companies should prioritize and uphold high standards in this aspect of dealership design to enhance customer perceptions and experiences.

### B. LOCATION

When designing the pre-sales process, the choice of location is paramount. It needs to prioritize convenience for customers while also fostering walk-in traffic. Ideal dealership locations are those situated in highly visible areas with easy access to main transport routes, and they feature an attention-grabbing facade.

  
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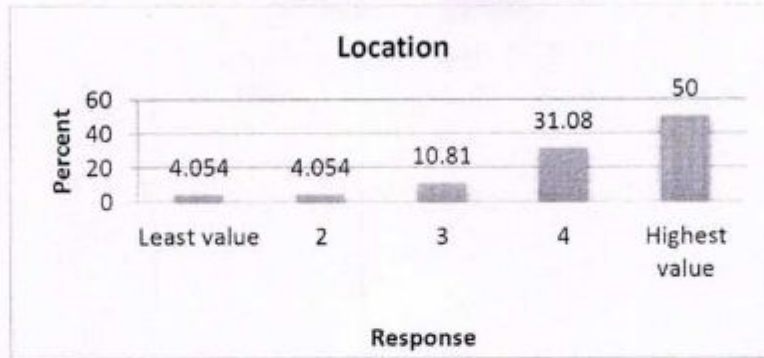


Figure 2: Rating by the Manager regarding Location of the dealership

As illustrated in figure, a substantial 81.2% of dealers have emphasized the importance of the dealership's location in the design of the sales process. This data highlights the critical role that location plays in shaping the success of a dealership's operations. Given the high rating of location by dealers, it becomes evident that selecting the right location is a crucial decision for dealerships. A strategic location that is easily accessible to both existing customers and potential prospects is not only a convenience but also has a direct impact on sales and overall profitability.

### C. PRODUCT DISPLAY

The product display is a pivotal factor in captivating and retaining the attention of customers. A well-executed product presentation contributes to the allure and intrigue of these machines. Dealerships typically showcase their top-of-the-line and latest models prominently at the front, recognizing that visual appeal often paves the way for test drives.

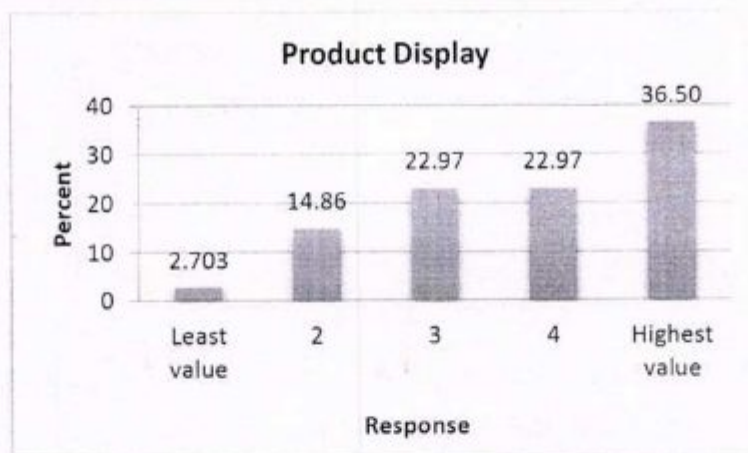
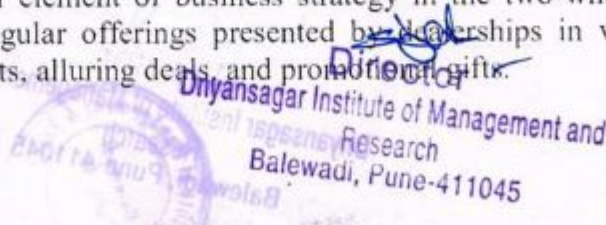


Figure 3: Rating by the Manager regarding product display in the dealership

From the information presented, a substantial 59.5% of dealers underscore the importance of displaying products effectively to stimulate purchases. They acknowledge that the two-wheeler display should serve as an inviting enticement to passers-by. Dealer managers emphasize that a well-conceived product display not only encourages sales but also piques the curiosity of potential customers.

### D. ATTRACTIVE DISCOUNT OFFERS

Discounts constitute an integral element of business strategy in the two-wheeler dealership realm. These incentives encompass regular offerings presented by dealerships in various forms, such as special schemes, festive discounts, alluring deals, and promotional gifts.





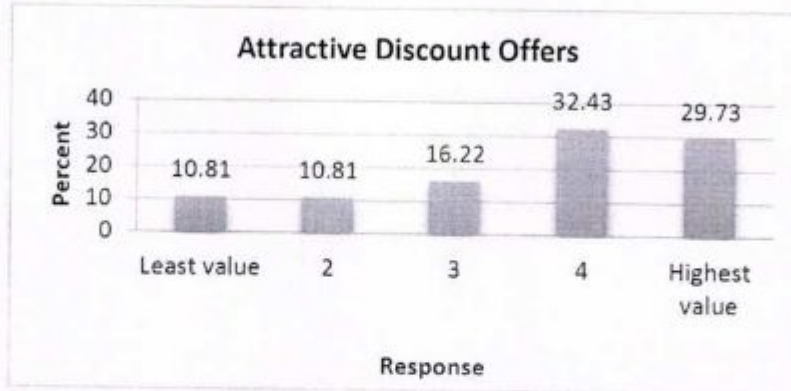


Figure 4: Rating by the Manager regarding attractive discounts offers of the dealership

Based on the data provided, it is evident that 62.1% of dealers consider attractive discount offers to be a crucial factor in shaping their sales processes. The provision of free gifts and other price reductions often proves effective in enticing buyers. Discounts and appealing offers have the potential to not only drive purchases among existing customers but also attract new ones. Additionally, they can divert customers from competitors and revitalize business, particularly during sluggish periods.

#### E. HELPFUL, COURTEOUS AND TRAINED SALES STAFF

Most potential buyers reach out to dealerships to gather information that aids in their purchase choices. In this context, the sales team's role is paramount, requiring them to engage with prospects confidently and establish a genuine connection through warm interactions, like a hearty handshake. Their courteous and helpful demeanor contributes to building trust with potential buyers.

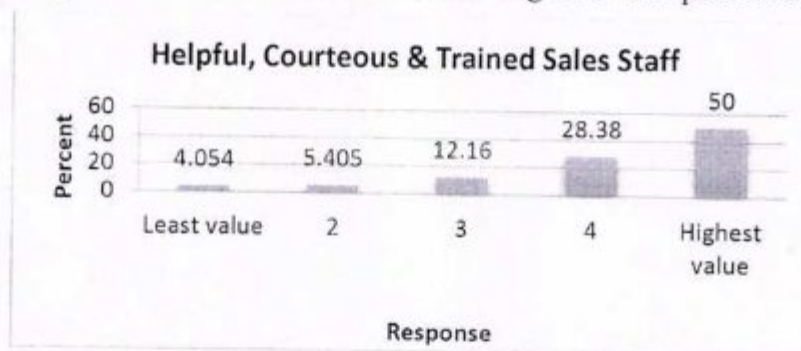


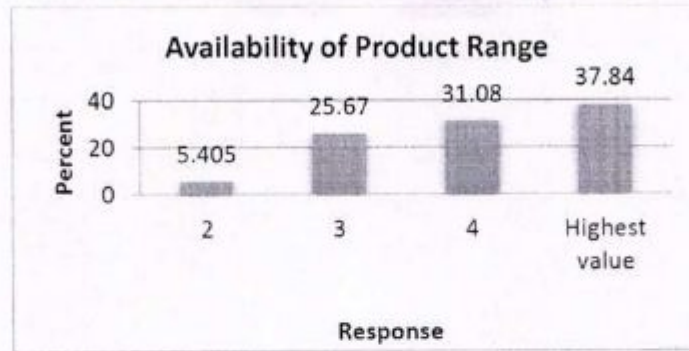
Figure 5: Rating by the Manager regarding Helpful, Courteous and Trained Sales Staff of the dealership

Analysis of the data reveals that a significant 78.4% of dealers place a high value on the presence of a helpful, courteous, and well-trained sales staff. It is imperative for dealerships to focus on retaining such valuable talent, as it not only enhances the potential for repeat sales but also fosters strong customer relationships.

#### F. AVAILABILITY OF PRODUCT RANGE

In today's fiercely competitive market, two-wheeler companies are vigorously diversifying their product offerings to cater to customer demands. This fierce competition ultimately benefits consumers who now have a wider array of brand and model choices than ever before. Consequently, the product range has become the hallmark of a two-wheeler company in the modern market.



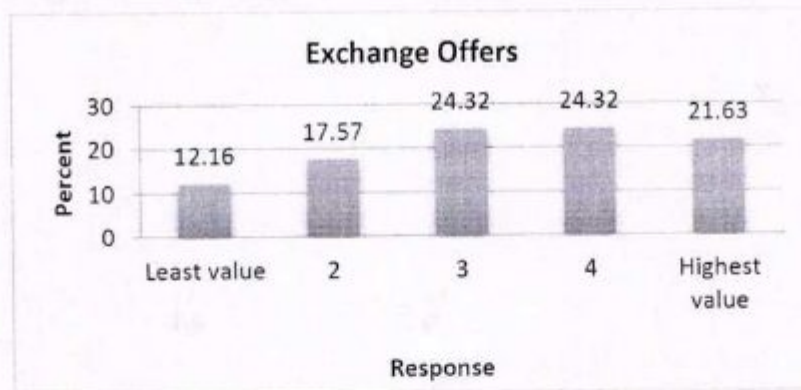


**Figure 6: Rating by the Manager regarding Availability of Product range at the dealership**

The significance of having a wide range of products available at dealerships is evident from the data presented in the table above. Among the 74 dealers surveyed, a substantial 68.9% have rated the availability of a diverse product range as a high-priority factor. This underscores the critical role that product range plays in the overall success of two-wheeler dealerships. A comprehensive product range not only attracts potential buyers but also fosters customer satisfaction and loyalty.

### G. EXCHANGE OFFERS

'Exchange offers' represent a prevalent sales promotion strategy, particularly in the two-wheeler industry, offering buyers the chance to receive value for their old two-wheelers. This promotional approach serves as a highly effective means to draw in both new and returning customers, effectively boosting sales. Dealerships frequently employ this practice, facilitated by the manufacturer, to enhance customer engagement by providing an opportunity to upgrade to a newer model.



**Figure 7: Rating by the Manager regarding Exchange offer' at the dealership**

The data depicted above shows that approximately 45.9% of the dealers view exchange offers as a factor of importance in their operations. Nevertheless, it is noteworthy that the impact of exchange offers does not rank as high as other factors such as store layout, interior design, location, product range, and the presence of knowledgeable and supportive sales staff.

### H. EASE AND FAST SALES PROCEDURE

In the realm of sales, identifying the buyer, understanding their preferences, and determining how the dealer can fulfill those desires is essential. When crafting their sales procedures, dealers place significant emphasis on streamlining and simplifying this process.

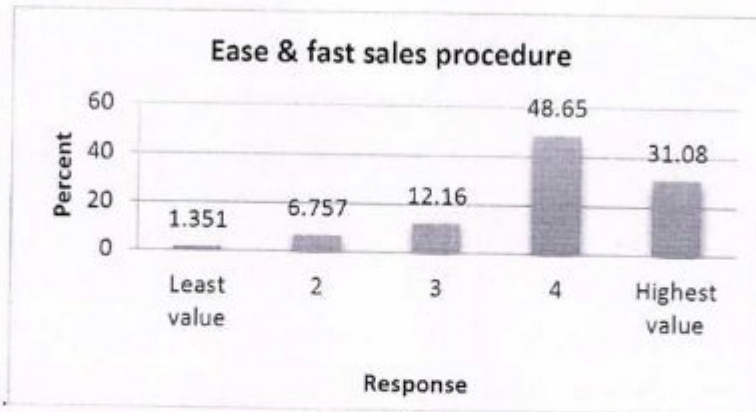


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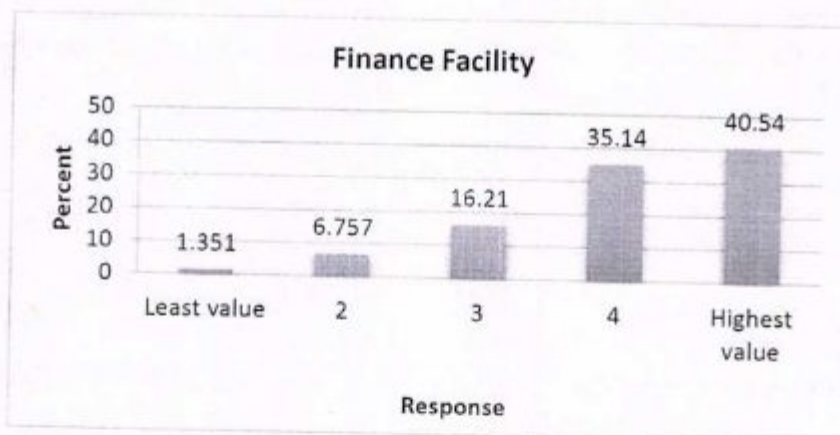


**Figure 8: Rating by the Manager regarding ease and fast sales procedure at the dealership**

The data provided above highlights the significance of ease and a fast sales procedure in the eyes of dealers, with a substantial 79.6% of them acknowledging its importance. This emphasis on efficiency is primarily driven by the busy schedules of customers who seek a swift and responsive sales service.

### I. FINANCE FACILITY

The dealer maintains affiliations with multiple finance partners, including banks and financial institutions. This collaborative approach offers customers a diverse range of financing options, enabling them to select a financial partner that aligns with their unique requirements and financial profiles.



**Figure 9: Rating by the Manager regarding finance facility at the dealership**

The data provided above highlights that 75.6% of dealers accorded great significance to the availability of finance facilities when formulating their sales strategies. To cater to their customers' financial needs in acquiring two-wheelers, dealers extend loan and financing services through their associated financial institutions. This finance facility enhances the purchasing capability of customers, acting as an incentive for them to invest in a two-wheeler, ultimately driving increased sales for the dealers.

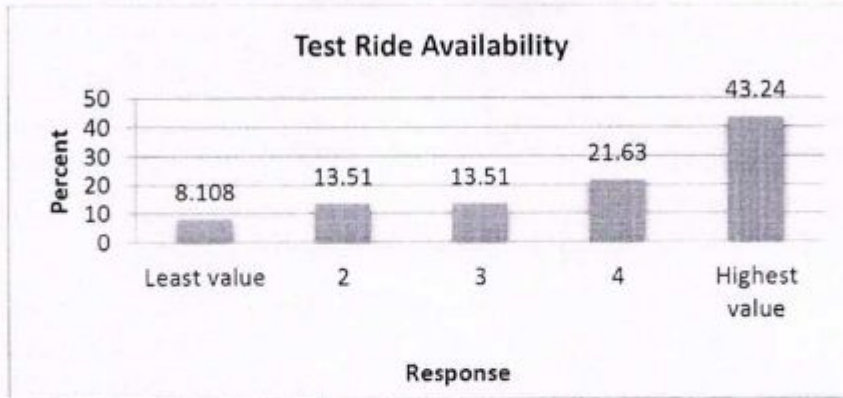
### J. TEST RIDE FACILITY

In today's fast-paced world, customers are increasingly looking for a hands-on experience before making a purchase decision. Providing a test ride facility enables potential buyers to feel the performance, comfort, and handling of a two-wheeler firsthand. It's a game-changer for dealers as it converts curious onlookers into satisfied customers.



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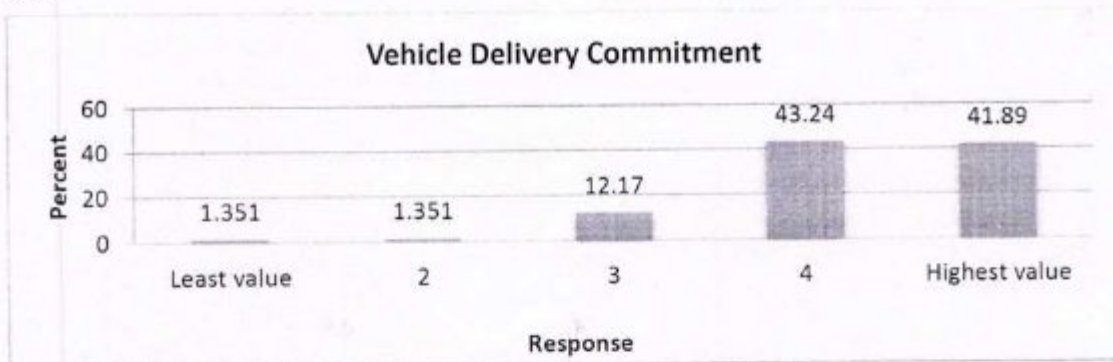


**Figure 10: Rating by the Manager regarding test ride facility at the dealership**

According to the data, 64.8% of dealers consider the test ride facility to be an important factor in their sales activities. The concept behind offering test rides is that it enables customers to spend time with the product, which, in turn, helps them better understand how it would feel to own it. This extended interaction can lead to a stronger connection between the customer and the product or service. It allows customers to form a more vivid mental picture of themselves as owners, increasing the likelihood of a successful sale.

#### K. VEHICLE DELIVERY COMMITMENT

"Vehicle delivery commitment" refers to a promise or assurance made by a seller or dealership to deliver a vehicle to the customer within a specified timeframe or under specific conditions. In the realm of two-wheeler dealerships, the concept of a "vehicle delivery commitment" holds paramount importance.



**Figure 11: Evaluation of Vehicle Delivery Commitment by the Dealership**

The data clearly underscores the significance of "vehicle delivery commitment" in the eyes of dealers, with a substantial majority of 63 dealers (85.1%) placing a high value on this aspect. This demonstrates that dealers recognize the crucial role of the sales experience, particularly concerning the commitments made during the delivery process and the adherence to delivery timing. This, in turn, is closely linked to the ultimate goal of achieving customer satisfaction.

#### FINDINGS

- Diverse Dealer Representation:** The study encompasses a diverse range of two-wheeler companies, with Honda, TVS, and Hero MotoCorp being the leading brands among the dealers.
- Impact of Physical Environment:** The layout, interior, and location of the dealership are critical factors in shaping the sales process, as rated by a significant majority of dealers.

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3. **Product Display and Range:** Effective product display and a wide range of products are highly valued by dealers, underscoring their importance for dealership success.
4. **Discount Offers and Sales Staff:** Attractive discount offers and the presence of a helpful, courteous, and well-trained sales staff play significant roles in the sales process.
5. **Finance Facilities and Efficiency:** Availability of finance facilities and a swift, efficient sales procedure are key considerations for dealers when formulating their sales strategies.
6. **Test Ride Facility and Vehicle Delivery Commitment:** Dealers acknowledge the importance of providing a test ride facility, with a majority rating it as an important factor. Furthermore, a substantial majority of dealers place a high value on "vehicle delivery commitment."

### SCOPE FOR FURTHER RESEARCH:

The scope for further research in the context of two-wheeler dealerships includes:

1. **Consumer Perceptions and Dealer Practices:** Investigate how dealer-rated factors such as layout, interior, location, and sales staff align with actual consumer perceptions and preferences to gauge their impact on customer satisfaction.
2. **Technology Integration:** Explore the role of technology in the sales process, particularly in an increasingly digital world. Examine how digital platforms, virtual test rides, and customer service tools impact dealership strategies and customer satisfaction.
3. **Market Trends and Dealer Strategies:** Analyze the evolving market trends, especially in the context of emerging technologies and environmental concerns, and assess how dealerships are adapting their strategies to meet changing customer demands in areas such as electric two-wheelers.

These areas of research would provide valuable insights into how dealerships can enhance customer satisfaction and optimize their sales strategies in response to evolving market dynamics and technological advancements.

### CONCLUSION

The study explores two-wheeler dealerships in Pune, with a focus on key manufacturers like Honda, TVS, and Hero MotoCorp. The dealership's physical environment significantly impacts the sales process, highlighting the importance of layout, interior design, and location.

Effective product presentation, a wide product range, discounts, and a skilled sales staff are critical for dealership success. Finance facilities and an efficient sales process are key in meeting modern customer expectations. The availability of a test ride facility and commitment to vehicle delivery also enhance customer satisfaction.

Our study offers a comprehensive understanding of dealership considerations, shedding light on the complex interplay of elements shaping customer experiences. These insights are invaluable for dealerships seeking success in the competitive two-wheeler market, meeting customer expectations effectively.

### LIMITATIONS

A few key limitations related to the research on two-wheeler dealerships:

1. **Sample Size and Diversity:** The study may have limitations related to the size and diversity of the sample. A larger and more diverse sample could provide more comprehensive insights and reduce the potential for sampling bias.





- Geographical Scope:** The findings are specific to Pune city and may not be directly applicable to other regions with differing market dynamics. The study's limitations in terms of geographical coverage may restrict its generalizability to a broader context.
- Temporal Factors:** The study's findings may not account for dynamic market changes that could have occurred after the data collection period. Market dynamics, consumer preferences, and dealership strategies can evolve rapidly, and these changes may not be reflected in the study's findings.

These limitations should be considered when interpreting the results and applying them to real-world dealership strategies, recognizing the need for further research to address these constraints.

### SUGGESTIONS

Based on the study's findings, dealerships should consider the following suggestions:

- Enhance the Physical Environment:** Invest in creating an appealing dealership layout, interior, and choose strategic locations to positively influence customer perceptions.
- Effective Product Display:** Improve product display methods to attract potential customers, making the dealership a more inviting and enticing space.
- Discount Strategies:** Implement attractive discount offers to incentivize purchases and gain a competitive edge in the market.
- Sales Staff Training:** Ensure sales staff is well-trained, courteous, and helpful, as their performance directly impacts the customer experience and overall sales success.
- Finance Options:** Explore and expand finance facilities to cater to a broader range of customers and make the purchasing process more accessible.
- Efficiency and Test Rides:** Streamline the sales process for efficiency to meet the demands of time-conscious customers. Additionally, continue to prioritize the provision of test ride facilities to allow customers to experience products firsthand, increasing the likelihood of sales.
- Maintain Delivery Commitments:** Continue to prioritize and honor vehicle delivery commitments, as this is a key factor in customer satisfaction and long-term success.

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## HARMONIZING DIGITAL HORIZONS: UNVEILING CUSTOMER USAGE PATTERNS IN MOBILE WALLETS

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### ABSTRACT

This study, conducted in Pune, Maharashtra, examines the usage patterns of mobile wallets, among 700 respondents. The research aims to gain insights into the motivations behind mobile wallet adoption, frequency of usage, the impact of security concerns, and the factors influencing the adoption of mobile wallet. The demographic profile of respondents, including gender, age, education, occupation, and income, is also analyzed.

The study employs a descriptive research design and utilizes both primary and secondary sources of data. Primary data is collected through structured questionnaires, interviews, and conversations, while secondary data is sourced from books, journals, and other relevant publications. The non-probability convenience sampling method is used for data collection.

Results indicate that respondents primarily use mobile wallets for frequent transactions such as online shopping and utility bill payments. Security concerns, though present, do not significantly deter usage. Factors influencing adoption include instant payment, discounts, and cashback offers. The study provides valuable insights for businesses and policymakers in the digital payment industry, shedding light on consumer preferences and usage patterns.

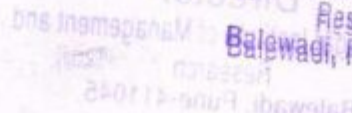
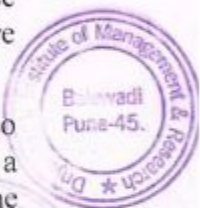
**KEYWORDS:** Payment preferences, Mobile wallet, Payment apps, Digital Money, Usage patterns, Adoption factors, Consumer behavior

### INTRODUCTION

In today's fast-paced digital age, the way we manage our finances and conduct transactions has undergone a remarkable transformation. One of the most significant advancements in this realm is the widespread adoption of mobile wallets. Mobile wallets have revolutionized the way we make payments, manage expenses, and experience financial convenience. These digital tools have become an integral part of our daily lives, offering seamless and secure alternatives to traditional cash and card transactions.

The adoption of mobile wallets has not only simplified payment processes but has also ushered in a new era of financial inclusion and empowerment. With just a few taps on a smartphone, users can pay bills, shop online, split expenses, and even invest their money. The convenience and versatility of mobile wallets have made them a ubiquitous presence in the lives of people from all walks of life.

This research embarks on a comprehensive exploration of mobile wallet usage patterns, seeking to unravel the intricacies that govern the choices and behaviors of users. We delve into the motives behind adopting mobile wallets, examine the frequency and diversity of transactions, and assess the level of satisfaction among users. Furthermore, we scrutinize the impact of demographic factors, technological preferences, and security concerns on mobile wallet usage.





## LITERATURE REVIEW

The field of mobile payments and digital wallets has witnessed substantial growth and interest over the years, with several notable studies contributing to our understanding of this dynamic domain. These studies and observations shed light on various aspects of adoption, usage patterns, and the significance of digital wallets in the modern financial landscape.

In their 2008 paper, Pousttchi and Wiedemann explored mobile payment adoption and discovered that subjective security was not the primary driver. Instead, factors like trustworthiness and the confidentiality of payment information played a pivotal role. They identified four key variables influencing user intent and behavior.

In 2015, Ghuman and Srivastava questioned consumer preferences regarding all-in-one platforms like Paytm versus specialized sites like FreeCharge.

Prof Trilok Nath Shukla, in a 2016 paper, provided insights into mobile wallets, emphasizing their importance for marketers and digital businesses, irrespective of their market status. The Reserve Bank of India (RBI) noted in 2017 the significant impact of demonetization on the growth of digital payment platforms like Paytm and Mobikwik, signaling a shift towards digital payments in India.

Punwatkar and Verghese's 2018 study uncovered several factors influencing the adoption of digital payments. These factors include 'economic value,' 'perceived usefulness,' 'perceived security,' 'privacy,' 'know-how,' and 'intention to use.'

In their 2019 study, Jain and Sabharwal found that most transactions now occur through mobile wallet apps. Younger generations are the primary users, while factors like legal requirements, low awareness, lack of trust, and security concerns discourage usage.

Collectively, these studies and observations highlight the multifaceted nature of mobile payments, including technological, consumer behavior, and regulatory factors. They underscore the role of trust, convenience, and specialization in shaping consumer preferences and driving the growth of digital payment platforms. Moreover, the RBI's observations illustrate how policy changes can significantly influence the adoption of digital wallets in a specific market. The research landscape in mobile payments and digital wallets remains dynamic and ever-evolving.

## SIGNIFICANCE OF THE STUDY

This study holds paramount significance as it delves into the intricate landscape of mobile wallet usage, providing crucial insights into the factors influencing adoption and usage patterns. In an era characterized by the rapid proliferation of digital payment solutions, understanding why individuals embrace mobile wallets and the determinants shaping their usage behavior is of profound importance. These insights have far-reaching implications, ranging from informing business strategies and enhancing user experiences to promoting financial inclusion and shaping regulatory policies. Additionally, this research contributes to the academic understanding of mobile payments, offering valuable knowledge for both scholars and practitioners in this evolving field, with potential global applicability.

## OBJECTIVES OF THE STUDY

1. To gain insights into the motivations behind individuals' adoption of mobile wallets.
2. To determine the frequency and specific scenarios in which people utilize mobile wallets for transactions.
3. To investigate the factors that influence the adoption of mobile wallet



## RESEARCH METHODOLOGY

**Research Design:** This research is conducted using a descriptive research design to ensure an effective and systematic investigation. The methodology comprises both primary and secondary sources of data collection.

**Primary Sources:** Primary data is gathered by conducting interviews, conversations, and utilizing structured questionnaires among mobile wallet users in the Pune region.

**Secondary Sources:** Secondary data is acquired from various secondary sources such as books, journals, and other relevant publications.

**Sampling Method:** Data collection is performed using a non-probability convenience sampling method.

**Sample Size:** The study encompasses responses from a sample size of 700 respondents.

**Scope of the Study:** This study focuses on analyzing the usage patterns of mobile wallets within the city of Pune. The data for this study was collected during the period of December 2022.

## ANALYSIS AND FINDINGS

### 1. DEMOGRAPHIC PROFILE OF THE RESPONDENTS

TABLE NO 1: DEMOGRAPHICS

Demographic Particulars	Classification	Percentage	Findings
Age(Years)	Below 20	18%	Majority of the respondents are in the group of 21 to 40
	21-30	40%	
	31-40	36%	
	41-50	6%	
	Above 50	0	
Gender	Male	72.85%	Majority of the respondents are male
	Female	27.14%	
Monthly Income	Below 20,000	7%	Majority of the respondents draw a monthly salary in the bracket of 20,000p.m to 40,000pm
	21,000-30,000	38%	
	31,000-40,000	46%	
	Above 40,000	9%	
Occupation	Student	37%	Majority of the respondents are from private services
	Home maker	35%	
	Government service	8%	
	Private service	47%	
	Business /Professionals	7%	
	Others	10.4	
Educational Qualification	SSC / HSC	20%	Majority of the respondents are graduates
	UG	53%	
	PG	27%	
	Others	0	



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## 2. USAGE PATTERN

### A. CASHLESS PAYMENT MODE PREFERENCES

In the table below, we present the modes of non-cash payment as selected by respondents in our research study.

**TABLE NO 2 CASHLESS PAYMENT MODE PREFERENCES**

Sr no	Cashless payment mode	No of responses
1	Debit card	310
2	Credit card	530
3	Mobile wallet	700
4	UPI	560

The table presents data on the preferences for different cashless payment modes, along with the number of responses for each mode. Here's the interpretation of the data:

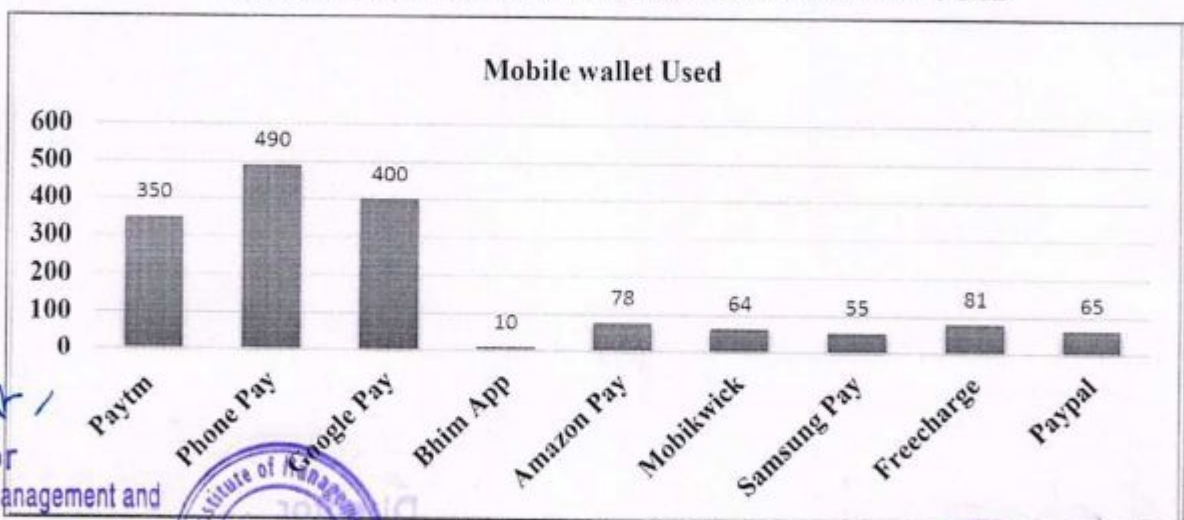
- Debit Card:** 310 respondents preferred using debit cards for cashless transactions.
- Credit Card:** Credit cards were the second most popular choice, with 530 respondents opting for this payment mode.
- Mobile Wallet:** Mobile wallets emerged as the most preferred cashless payment mode, with a significant 700 respondents selecting this option.
- UPI (Unified Payments Interface):** UPI was also a popular choice, with 560 respondents indicating a preference for this mode.

From this data, it's evident that mobile wallets are the most favored cashless payment mode among the respondents, followed by credit cards, UPI, and debit cards in descending order of preference.

### B. MOBILE WALLET PREFERENCE TRENDS AMONGST USERS: (MULTIPLE CHOICE)

In the ever-evolving landscape of digital payments, users exhibit diverse preferences for mobile wallet applications. From the familiar Paytm to the convenience of Phone Pay and the trust in Google Pay, we explore the diverse range of options embraced by users.

**GRAPH NO.1: DIFFERENT MOBILE WALLET USED**



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These statistics provide insights into the popularity of various mobile wallets among the respondents. PhonePe appears to be the most widely used mobile wallet among the surveyed individuals, followed closely by Google Pay and Paytm. Other wallets like Amazon Pay, Freecharge, and PayPal also have a significant user base.

**C. MOBILE WALLET ADOPTION DURATIONS**

**TABLE NO 3: DURATION OF MOBILE WALLET ADOPTION**

Sr no	Duration	No of responses	Percent
1	Less than one year	10	1%
2	1-2 year	230	33%
3	2-3 year	400	57%
4	More than 3years	60	9%

The usage patterns of mobile wallets among respondents reveal interesting insights. Among the participants, a significant 33% have been using mobile wallets for a duration ranging from 1 to 2 years, showcasing a growing user base. Moreover, a substantial 57% of respondents have been consistent users of mobile wallets for 2 to 3 years, highlighting its enduring appeal and utility in their lives.

**D. SOURCES OF MOBILE WALLET AWARENESS (MULTIPLE CHOICE)**

The analysis of the sources of mobile wallet awareness reveals valuable insights into how users gather information about mobile wallets.

**TABLE NO 4: SOURCES OF MOBILE WALLET AWARENESS**

Sr no	Awareness	No of responses
1	Radio & Television	530
2	Friends and relatives	520
3	Newspaper, magazines	420
4	Websites	140
5	Shopping sites	200
6	Other	80

The data on awareness sources for mobile wallets reveals that respondents primarily become aware of this payment method through friends and relatives (520 respondents) and television and radio advertisements (530 respondents). Print media, such as newspapers and magazines, also contribute significantly, with 420 respondents citing them as a source. Additionally, some respondents mentioned websites (140) and shopping sites (200) as channels for discovering mobile wallets. A smaller group of respondents (80) learned about mobile wallets through various other sources, including advertising and billboards. Overall, this data highlights the diverse channels mobile wallets use to raise awareness, with personal networks and electronic media playing crucial roles.

**E. FREQUENCY OF MOBILE WALLET USAGE**

Below table shows the frequency of usage of mobile wallet in a day

**TABLE NO 5: FREQUENCY OF MOBILE WALLET USAGE**

Sr no	Frequency of usage	No of responses	Percent
1	Once a day	73	10
2	2-5 times a day	190	27
3	5-10 times a day	280	40



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4	More than 10 times a day	157	22
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The data presented in the table reveals the frequency of mobile wallet usage within a day. This breakdown offers valuable insights into how individuals engage with mobile wallets for their daily transactions:

Firstly, a segment of respondents (10%) falls into the category of using their mobile wallet once a day. This group likely includes individuals who rely on mobile wallets for specific daily transactions or have more infrequent usage. The most prominent group comprises those who use mobile wallets 2-5 times a day, accounting for 27% of the respondents. This indicates that a significant portion of the surveyed population leverages mobile wallets for a range of transactions throughout their daily routines. An even larger group (40%) utilizes their mobile wallets 5-10 times daily, showcasing a substantial preference for this payment method in numerous daily transactions. Furthermore, a notable 20% of respondents go beyond this and use their mobile wallets more than 10 times a day, indicating a high level of dependence on mobile wallets for various transactions throughout the day.

#### F. MOBILE WALLET USAGE PREFERENCES FOR VARIOUS TRANSACTIONS (MULTIPLE CHOICE)

In this section, we delve into the diverse transactions for which respondents prefer using mobile wallets. Participants were presented with multiple options and allowed to select all the scenarios in which they utilize mobile wallets for cashless transactions. The results reveal intriguing insights into the versatility of mobile wallets in modern-day transactions.

TABLE NO 6: MOBILE WALLET USAGE PREFERENCES

Sr no	Preferences	No of responses
1	Food	360
2	Movie ticket	300
3	Utility bill payment	130
4	Online shopping	330
5	Transportation	140
6	Transfer money	490
7	Books	20
8	Apparel	80

From the analysis of the graph depicting respondent preferences regarding the usage of mobile wallet apps for purchasing goods and services, several key insights emerge:

- Food:** A notable 360 respondents prefer to use mobile wallets for ordering food online, indicating the convenience and popularity of mobile wallets in the food delivery segment.
- Movie Tickets:** Movie ticket bookings are another significant use case, with 300 respondents choosing to book their movie tickets using mobile wallets, emphasizing their convenience in the entertainment sector.
- Utility Bill Payment:** A smaller segment of 130 respondents uses mobile wallets for utility bill payments, showcasing their potential for streamlining financial transactions beyond everyday shopping.
- Online Shopping:** Online shopping emerges as a popular choice, with 330 respondents utilizing mobile wallets for making purchases, underscoring their role in e-commerce transactions.

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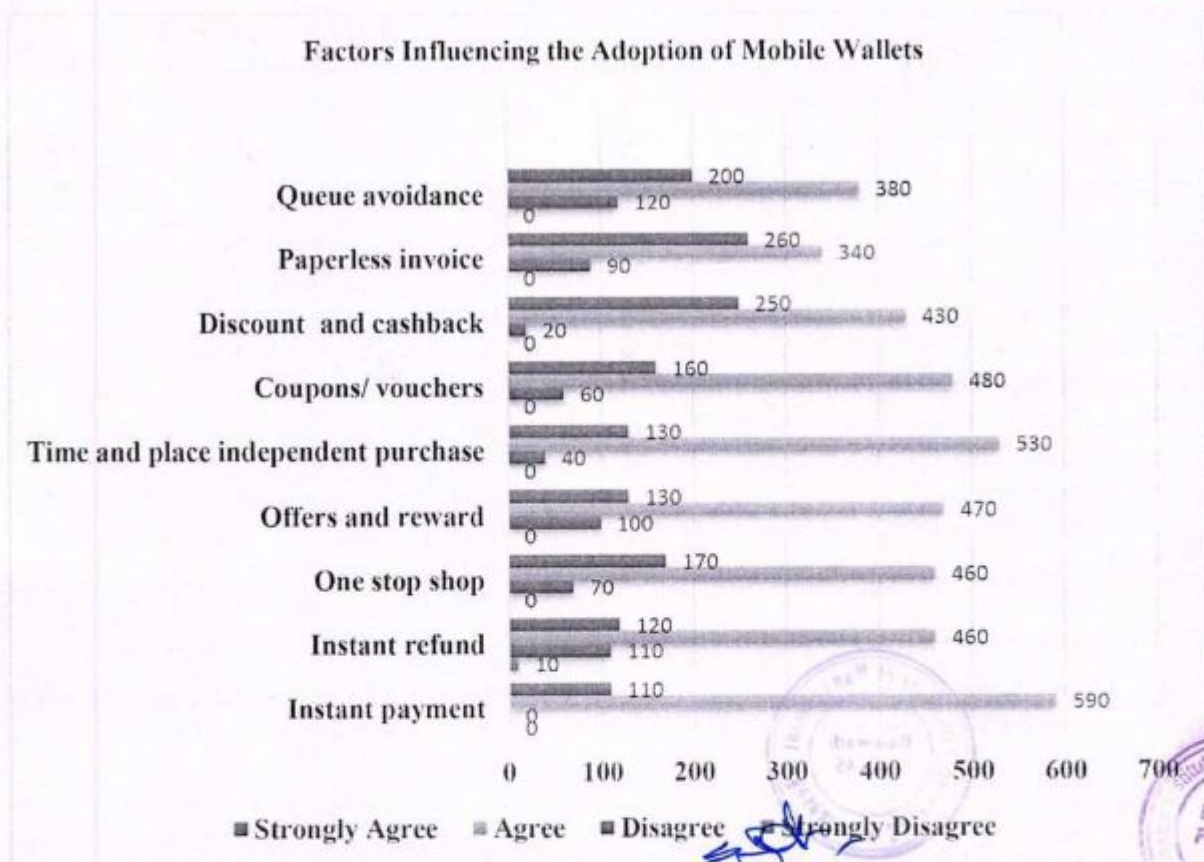
5. **Transportation:** Mobile wallets are also favored by 140 respondents for transportation-related payments, highlighting their use in the travel and commute sector.
6. **Money Transfer:** The majority of respondents, a substantial 490, utilize mobile wallets for money transfers, reflecting their role as a versatile tool for peer-to-peer transactions.
7. **Books:** While not a primary choice, a limited 20 respondents use mobile wallets for purchasing books, indicating a niche but existent interest in mobile wallet use for educational purposes.
8. **Apparel:** Similarly, mobile wallets are used by 80 respondents for purchasing apparel, suggesting their relevance in the fashion and clothing industry.

In conclusion, the analysis demonstrates that mobile wallets have found utility in various aspects of daily life, from ordering food and booking movie tickets to handling financial transactions and online shopping. This diversity in usage patterns underscores the adaptability and convenience of mobile wallet apps in catering to a wide range of consumer needs.


### 3. FACTORS INFLUENCING THE ADOPTION OF MOBILE WALLETS

The table presented below illustrates the various factors that impact the acceptance and use of mobile wallet applications. These factors have been assessed on a scale ranging from 'strongly disagree' to 'disagree,' 'agree,' and 'strongly agree.' The information is also visually depicted in the accompanying graph.

GRAPH NO.2



The analysis of factors influencing the adoption of mobile wallet is as follows:

  
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1. **Instant Payment:** A majority of respondents (84%) find instant payment appealing, with 70% agreeing and 14% strongly agreeing with this feature.
2. **Discounts and Cashback:** The prospect of receiving discounts and cashback is highly influential, with 68% agreeing and 10% strongly agreeing.
3. **Time and Place Independence:** Most respondents (73%) appreciate the ability to make transactions at their convenience, with 53% agreeing and 20% strongly agreeing.
4. **Coupons and Vouchers:** Overwhelmingly, 80% of respondents are in favor of coupons and vouchers, with 64% agreeing and 16% strongly agreeing.
5. **One-Stop Shop:** The idea of a one-stop shop for various transactions is well-received, as 63% agree and 17% strongly agree.
6. **Offers and Rewards:** A significant portion (60%) of respondents see offers and rewards as an attractive feature.
7. **Paperless Invoice:** While not as strong as other factors, 60% of respondents agree (34%) or strongly agree (26%) with the concept of paperless invoices.
8. **Queue Avoidance:** The convenience of avoiding queues influences 66% of respondents, with 38% agreeing and 28% strongly agreeing.
9. **Instant Refund:** A majority of respondents (58%) appreciate the idea of instant refunds, with 46% agreeing and 12% strongly agreeing.

These findings reveal that mobile wallets success in driving adoption can be attributed to its ability to offer instant transactions, attractive discounts, and cashback opportunities, along with the convenience of anytime, anywhere transactions. Additionally, the platform's provision of coupons, a one-stop shop, and offers/rewards plays a significant role in attracting users.

## CONCLUSION

This research study delved into the intricate landscape of customer usage patterns concerning mobile wallets in India. It underscores the importance of targeted outreach to diversify the user base, emphasizing the need for more inclusive adoption, particularly among women. While major players like Paytm, PhonePe, and Google Pay dominate the landscape, emerging competitors indicate space for innovation and competition. The significance of incentives, user-friendliness, and versatile application offerings becomes evident. Effective marketing strategies are pivotal to raise awareness and attract users. Moreover, mobile wallets have become an integral part of everyday financial transactions. This study serves as a compass, guiding stakeholders in this dynamic field toward sustained growth and success.

## SUGGESTION

The study's findings offer several pertinent suggestions for the mobile wallet industry:

To address the gender imbalance in mobile wallet adoption, providers should launch targeted campaigns to encourage more women to embrace this technology. The establishment of a comprehensive feedback mechanism is crucial. Gathering and analyzing customer feedback regularly can uncover areas for improvement, ensuring a more user-centric approach. Mobile wallet providers should remain vigilant about regulatory compliance. Adhering to guidelines set by the Reserve Bank of India (RBI) is essential, and if applicable, they should consider acquiring payment bank licenses. Enhancing customer support services is essential. Timely issue resolution and effective support can significantly enhance user satisfaction and trust in



mobile wallet platforms. Strategic collaborations with telecom companies are advisable to bolster network connectivity. This would result in a smoother and more uninterrupted mobile wallet service, ultimately benefiting the end user.

These suggestions, when executed effectively, have the potential to drive the growth and sustainability of mobile wallet services in the dynamic Indian market.

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## A Study of Factors that Influence the Quick Service Restaurants of Baner and Balewadi to OPT for Online Food Ordering Portals

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### ABSTRACT

**Purpose:** This study investigates the impact of online food ordering portals on Quick Service Restaurants (QSRs) in Baner and Balewadi. It aims to identify the factors that drive QSRs to adopt online food ordering services, resulting in business expansion, increased customer reach, higher profits, and improved customer loyalty. Additionally, the research explores the contribution of online food ordering portals to awareness creation and revenue generation in the QSR industry. **Methodology:** The research employed a descriptive research design to analyse the QSR landscape in Baner and Balewadi. Secondary information from books and online sources provided insights into online food ordering trends. Primary data was collected through a survey of 52 QSRs using convenience sampling. Questionnaires were administered to QSR owners or managers, and data analysis involved counting, comparing, and presenting the findings using Microsoft Excel. **Findings:** The study revealed that partnering with online food ordering portals had a significant positive impact on QSRs in Baner and Balewadi. It resulted in increased sales and revenue growth, driven by the expanded customer reach and convenience offered by these platforms. QSRs also experienced improved customer attraction and retention, contributing to enhanced business prospects. **Implications:** The findings emphasize the significance of online food ordering portals for QSRs, enabling them to expand their reach, boost sales, and cultivate customer loyalty. Partnerships with online portals offer QSRs valuable opportunities to enhance their business prospects. The insights from this study can assist QSRs in making informed decisions regarding marketing strategies and establishing a strong online presence.

**Keywords:** Online food ordering portals, Quick service restaurants (QSRs), Influence, Business expansion, Customer loyalty.

**JEL Classifications:** L83 & 87

### INTRODUCTION:

The fast food industry, particularly quick service restaurants (QSRs), has witnessed a significant shift towards online ordering platforms. This trend is driven by the growing preference of consumers, especially millennials, to order food online. Studies indicate that 40 percent of consumers prefer online ordering, leading to a 26 percent increase in spending. The India online food delivery market size reached US\$ 28.4 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 118.2 Billion by 2028, exhibiting a growth rate (CAGR) of 27.8% during 2023-2028.

Online food ordering platforms, such as Swiggy, Zomato, UberEats and Foodpanda, have experienced remarkable growth in the number of daily orders. To optimize their services, these platforms have started investing in in-sourcing deliveries, leading to a significant increase in self-deliveries. This shift has allowed them to reduce the average delivery time, ultimately enhancing customer satisfaction and encouraging repeat orders. Restaurants recognize the need for a seamless and consistent approach to enhance their operations and increase sales. Online food ordering portals have been developed by experienced professionals to serve both restaurants and customers conveniently. These platforms offer tailored websites and applications for restaurants to manage online food sales, order processing, and delivery. Users can easily search and filter restaurants based on their location, placing orders with the most suitable options. Leading players in the market, such as Swiggy and Zomato, have chosen to handle deliveries in-house to ensure better control and efficiency. Their focus on in-house deliveries has allowed them to maintain full control over the delivery process and guarantee customer satisfaction.



The preference for online food ordering is driven by several factors, including instant gratification, order accuracy, price transparency, elimination of language barriers, and the convenience of saved payment information. Consumers appreciate the ability to browse menus, select items, and place orders at their convenience without the need for waiting or language communication barriers.

In conclusion, the influence of online food ordering portals on QSRs has transformed the fast food industry. With the growing demand for convenience and the advantages offered by online ordering, the industry is expected to continue its upward trajectory. QSRs and online food ordering platforms are capitalizing on this trend to enhance customer experiences, increase revenues, and shape the future of food delivery services.

#### **NEED FOR THE STUDY:**

The dynamic nature of the food service industry necessitates a deeper understanding of the factors driving Quick Service Restaurants (QSRs) in Baner and Balewadi to adopt online food ordering platforms. With a growing number of customers embracing the convenience of online ordering, it is crucial to investigate the reasons behind QSRs' adoption of these platforms. This research paper aims to examine and analyse the key factors that influence QSRs in Baner and Balewadi to integrate online food ordering portals into their operations. By identifying these factors, QSRs can make informed decisions to effectively cater to the evolving preferences of their customers and enhance their competitive edge in the market.

#### **OBJECTIVES OF THE STUDY:**

The objectives of the study are-

1. To gain a comprehensive understanding of online food ordering portals and quick service restaurant
2. To examine the factors that influence restaurants in the Baner and Balewadi areas to adopt online food ordering portals, identifying the drivers behind their decision-making process

#### **SCOPE OF THE STUDY:**

The study encompassed a total of 52 QSRs located in the Baner and Balewadi areas. Convenience sampling, a non-probability sampling method, was utilized to select the participating QSRs. This method allowed for a convenient selection of restaurants that were easily accessible and willing to participate in the study. The findings derived from this sample are intended to provide insights into the factors influencing QSRs in this specific region.

#### **LITERATURE REVIEW:**

(Mukherjee, 2022) examines the impact of food delivery start-ups like Zomato and Swiggy on the restaurant industry, analyzing the strategies of popular food delivery apps, and understanding the factors influencing consumers' choice of online food delivery services. The findings highlight the importance of online ordering software and maintaining a strong online presence for effective food delivery operations.

(John, 2021) provides a comprehensive evaluation of the impact of the COVID-19 pandemic on the food services sector in India, using secondary data from credible sources. The findings suggest that digitally-driven formats such as cloud kitchens and delivery aggregators are poised to dominate the industry in the long term. Although the study relies solely on secondary data, future research should incorporate consumer responses to better understand post-pandemic dining habits. The study highlights the transformative effects of the pandemic on food service consumption and emphasizes the need to study the evolving landscape facilitated by digital technologies. Overall, it offers valuable insights and generates potential research questions in the realm of food services in the context of the pandemic.

(Mrs.R.Saranya & Dr.T.Sreerexha, 2021) the study showcases the increasing popularity of online food ordering systems, with 96% of respondents utilizing this convenient option. Swiggy is the preferred choice for 58% of participants due to its extensive market presence. Factors such as faster delivery and discounts play a crucial role in influencing customer decisions. The study emphasizes the significance of a user-friendly online food ordering system to enhance the overall customer experience. Overall, the findings highlight the widespread adoption of online food delivery platforms, with Swiggy emerging as the preferred app among the selected options.

(Gupta, 2019) explores the benefits, as well as the positive and negative effects, of electronic food delivery and various online food delivery applications. Additionally, the research delves into the strategies employed and understanding the impact of food delivery apps, with specific emphasis on Zomato and Swiggy on the restaurant business. The findings of this study will contribute to our understanding of how these platforms have reshaped the industry and their influence on restaurant operations.



**RESEARCH METHODOLOGY:**

The research methodology employed in this study involved a literature review to understand online food ordering portals and quick service restaurants, followed by empirical research in the form of a structured questionnaire administered to 52 quick service restaurants in Baner and Balewadi. The collected data was analyzed quantitatively, utilizing statistical techniques to identify the factors influencing restaurants' adoption of online food ordering portals. By combining the insights from the literature review and empirical research, this study provides a comprehensive understanding of the subject and contributes to the existing knowledge in the field, benefiting QSR owners, online food ordering platforms, and researchers in making informed decisions and developing effective strategies in the evolving food service industry.

**RESEARCH DESIGN:**

The research design employed in this study is descriptive research. Descriptive research focuses on describing the characteristics and features of a specific group or situation. In this case, the objective was to describe the factors influencing QSRs in Baner and Balewadi to adopt online food ordering portals.

**DATA COLLECTION:**

**Primary Data:**

The primary data for this study was collected through a structured questionnaire administered to 52 quick service restaurants (QSRs) in the Baner and Balewadi areas. The questionnaire allowed the researcher to gather specific information directly from the restaurants regarding their use of online food ordering portals.

**Secondary Data:**

In addition to primary data collection, secondary data sources were utilized. These included online food ordering portals themselves, as well as the current websites of the QSRs under study. The secondary data provided supplementary information and insights related to the topic.

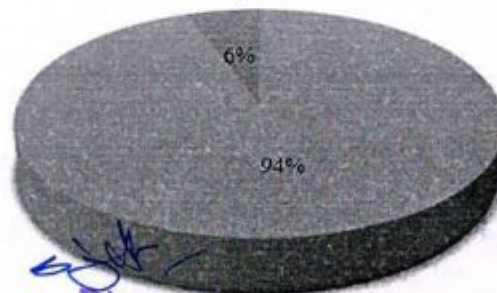
**Sampling: Convenience sampling (non-probability sampling)**

Convenience sampling, a non-probability sampling method, was employed in this study to select quick service restaurants (QSRs) in the Baner and Balewadi areas as participants. This sampling approach was chosen due to its convenience and practicality, allowing for the selection of readily accessible and willing QSRs. While the use of convenience sampling may limit the generalizability of the findings to the wider population, it served as a feasible and efficient method within the study's constraints, providing insights into the factors influencing QSRs' adoption of online food ordering portals in the specific context.

**RESULTS AND DISCUSSION:**

The primary data collected through the questionnaire was analyzed using the percentage method, and the findings were visually represented through graphs and charts. The data analysis was based on the responses obtained from the quick service restaurants (QSRs) in the Baner and Balewadi areas, and the interpretation of the data led to the following conclusions. The results obtained from the data collected from the QSRs in Baner and Balewadi are as follows:

**Adoption of Online Food Delivering Portals**



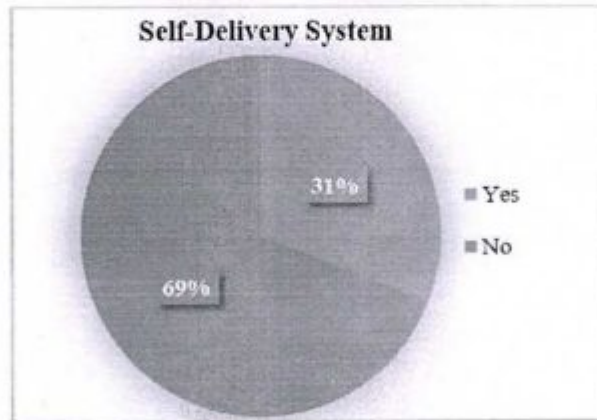
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Graph No- 1.1





**Adoption of Online Food Delivering Portals:**

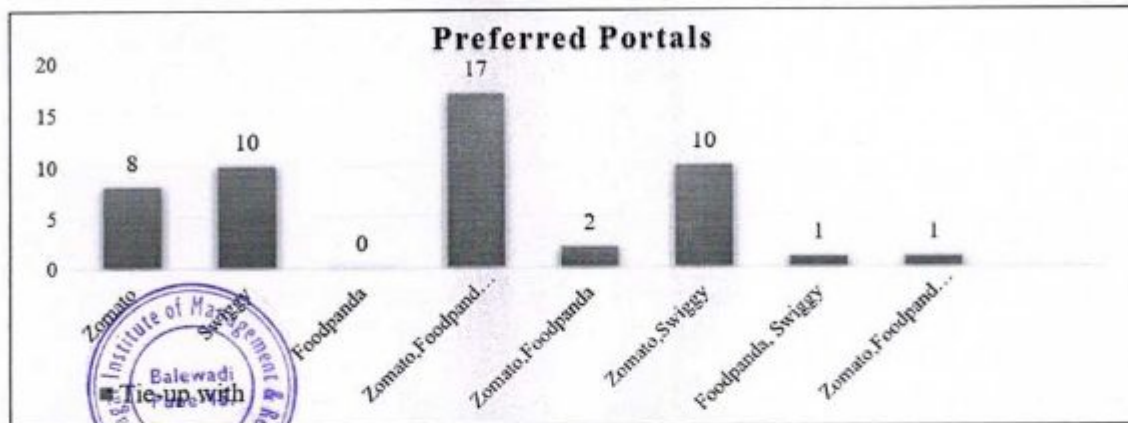
The survey findings indicate that a significant majority (94%) of the quick service restaurants (QSRs) surveyed in the Baner and Balewadi areas have adopted online food delivering portals. This high adoption rate signifies the widespread acceptance and utilization of these platforms among QSRs in the region. It reflects the recognition of the benefits offered by online food delivering portals, such as increased customer reach, convenience, and the ability to tap into the growing trend of online food ordering. The high adoption rate underscores the significance of these platforms in the operations and growth of QSRs, highlighting their importance in the evolving food service industry.



Graph No- 1.2

**Self-Delivery System:**

The study findings reveal that approximately 69% of the quick service restaurants (QSRs) in Baner and Balewadi do not have their own self-delivery system. Instead, they rely on the delivery services provided by online food delivering portals. The main reason for this reliance is the difficulties faced by these QSRs in managing deliveries independently. This may include challenges related to logistics, resources, or operational constraints. By utilizing the delivery services offered by online portals, these QSRs can overcome these challenges and ensure efficient and timely delivery to their customers. This finding highlights the role of online food delivering portals in supporting QSRs' delivery operations and enabling them to focus on their core business activities.



Graph No- 1.3

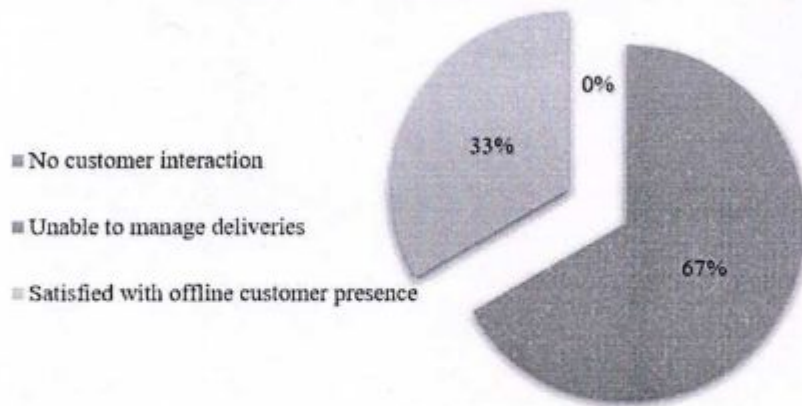
**Preferred Portals:**

The survey results indicate that the majority of quick service restaurants (QSRs) in Baner and Balewadi have established tie-ups with online food delivering portals, with Zomato being the most preferred choice. Following Zomato, the QSRs have partnered with Swiggy, and then Foodpanda. These findings suggest that Zomato, Swiggy, and Foodpanda are the preferred platforms for QSRs in terms of forming partnerships. The popularity of these platforms may be attributed to factors such as their user base, market presence, and the range of services they offer to QSRs. This insight can assist other QSRs in making informed decisions when considering tie-ups with online food delivering portals.

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**Reasons for not using the Portals**

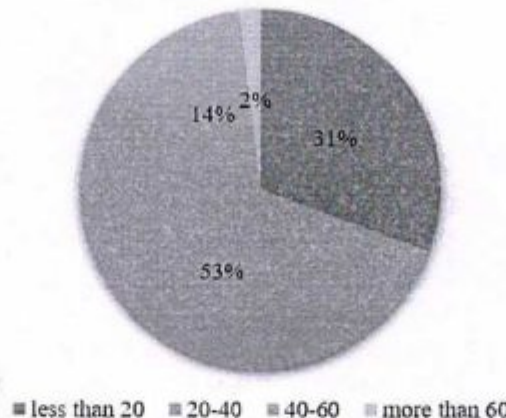


**Graph No – 1.4**

**No Tie-up:**

From the survey, it was observed that out of the 52 quick service restaurants (QSRs) surveyed, two QSRs do not have a tie-up with any online portal. The main reason for this is their inability to manage deliveries themselves. These QSRs may lack the necessary infrastructure or resources to handle the logistics of online food delivery. However, it is worth noting that one QSR expressed satisfaction with their offline customer presence and therefore did not feel the need to establish a tie-up with an online portal. These findings highlight the diversity of approaches and circumstances among QSRs in Baner and Balewadi regarding their engagement with online food delivering portals.

**Regular Customer Range**



**Graph no. 1.5**

**Regular Customer Range:**

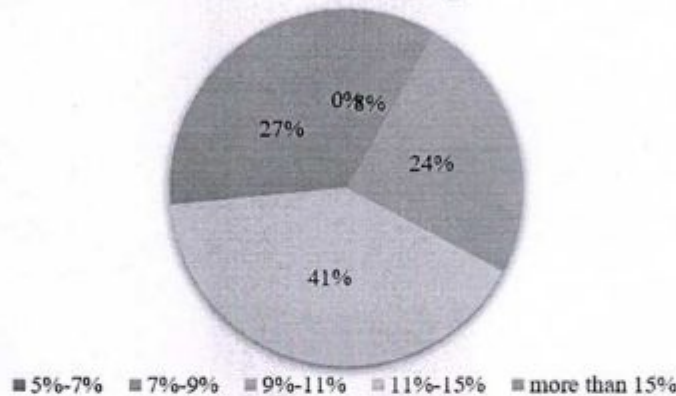
The study findings indicate that prior to their tie-up with online food delivering portals, the majority of quick service restaurants (QSRs) in Baner and Balewadi had a regular customer range between 20-40 customers. This suggests that these QSRs had an existing customer base before venturing into online food delivery services. The data implies that the QSRs recognized the potential of online portals to expand their customer reach beyond their existing customer base, thereby tapping into a larger market and potentially increasing their customer base. By partnering with online food delivering portals, these QSRs aimed to attract a wider range of customers and enhance their overall business growth.

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**Commission Charges**

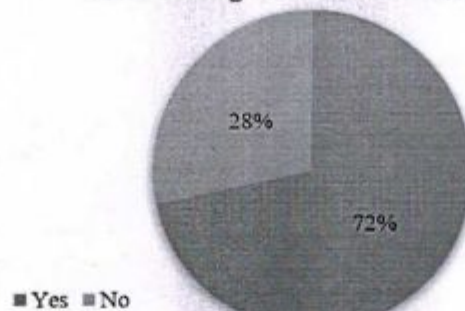


**Graph No. 1.6**

**Commission Charges:**

The analysis of the data reveals that when it comes to commission charges imposed by online food delivering portals, 41% of the quick service restaurants (QSRs) surveyed are charged a commission ranging from 11% to 15%. Additionally, 27% of the QSRs reported being charged a commission rate higher than 15% by the portals. These findings highlight the variation in commission rates among different QSRs and the impact it can have on their profitability. QSRs must carefully consider the commission charges imposed by online portals when deciding to partner with them, as it can significantly affect their revenue and profitability margins.

**Attracting More Customers**

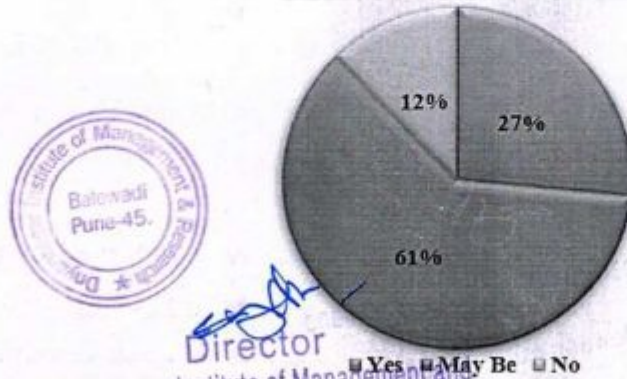


**Graph No. 1.7**

**Attracting More Customers:**

The survey results indicate that after associating with online food delivering portals, a significant majority (73%) of the quick service restaurants (QSRs) in Baner and Balewadi observed that they were able to attract more customers. This finding highlights the positive impact of online platforms on customer acquisition for QSRs. By partnering with these portals, QSRs have been able to tap into a wider customer base and reach new audiences who prefer the convenience of ordering food online. The ability to attract more customers through these platforms can contribute to the overall growth and success of QSRs in the competitive food service industry.

**Decrease in Rush Hours**



**Graph No. 1.8**

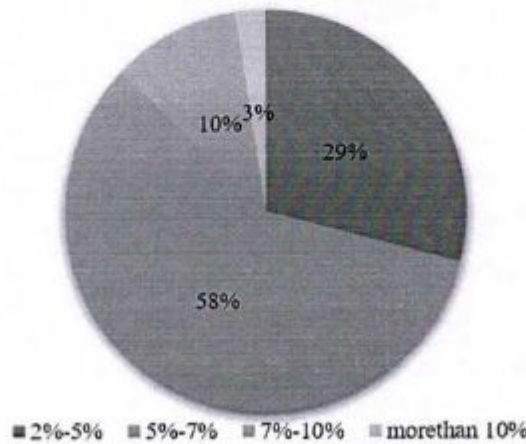
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**Decrease in Rush Hours:**

The survey findings indicate that the majority of quick service restaurants (QSRs) in Baner and Balewadi are unsure about whether there is a decrease in customer rush hours at their establishments since partnering with online food delivering portals. However, a few QSRs agree that there has been a decrease in rush hours. These results suggest that the impact of online food delivery services on customer footfall during traditional peak hours is not universally perceived by all QSRs. It highlights the need for further examination and analysis to understand the specific dynamics and effects on customer behavior during different times of the day.

**Increase in Sales**

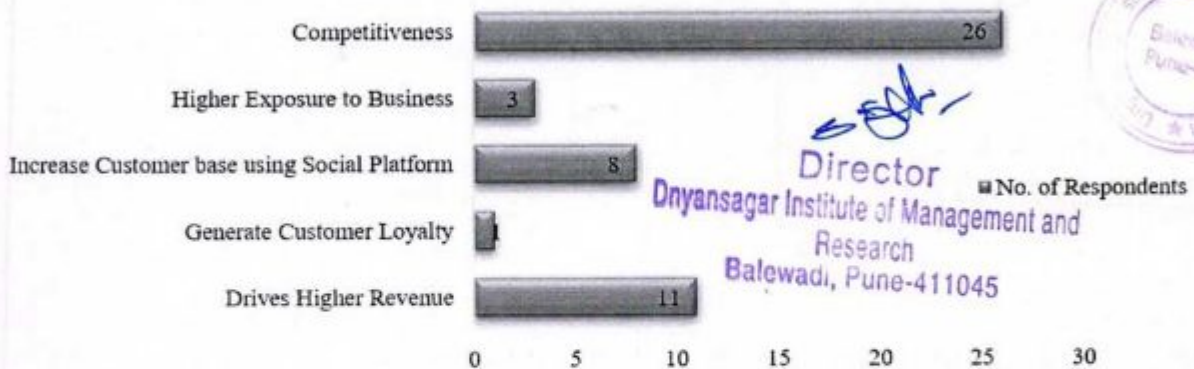


**Graph No. 1.9**

**Increase in Sales:**

The study findings reveal that approximately 58% of the quick service restaurants (QSRs) in Baner and Balewadi reported an increase in sales after partnering with online food delivering portals. The sales increase ranged from 5% to 7%, indicating a positive impact on the QSRs' revenue generation. This finding suggests that online portals have contributed to the growth of QSRs by attracting more customers and generating higher sales. The increase in sales can be attributed to the convenience and accessibility offered by online food delivery platforms, which have expanded the QSRs' customer reach and enabled them to tap into a larger market.

**Influencing Factors Choice**



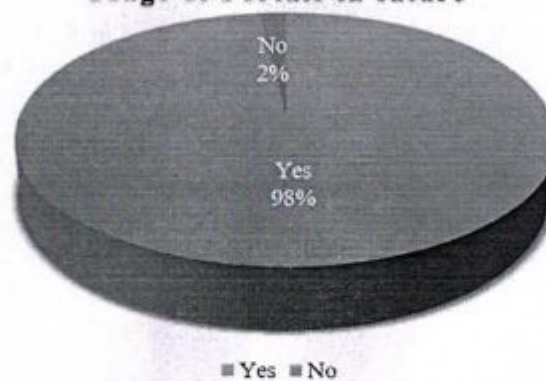
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**Factors Influencing Choice:**

The study findings indicate that quick service restaurants (QSRs) in Baner and Balewadi are influenced by several factors when choosing online food delivering portals. The majority (53%) prioritize competitiveness, aiming to stay competitive in the market. Additionally, 23% focus on driving higher revenue, while 16% emphasize utilizing social media platforms to expand their customer base. These findings underscore the diverse influences that shape QSRs' decisions, including competitiveness, revenue generation, and leveraging social media for business growth.



### Usage of Portals in future



Graph No.1.10

#### Future Use of Portals:

The survey results reveal that a striking 98% of the quick service restaurants (QSRs) in Baner and Balewadi expressed their intention to continue using online food ordering portals in the future. This overwhelming majority indicates a strong endorsement of the value and benefits provided by these platforms. The QSRs recognize the importance of online food ordering portals in expanding their customer base, increasing convenience, and driving revenue growth. Only a small percentage (2%) stated that they would not wish to use the portals, suggesting that the vast majority of QSRs see a long-term strategic advantage in maintaining their presence on these platforms. This finding underscores the integral role of online food ordering portals in the future operations and success of QSRs in Baner and Balewadi.

These findings provide valuable insights into the experiences and perceptions of QSRs in Baner and Balewadi regarding their usage of online food delivering portals, highlighting the benefits, challenges, and future intentions related to these platforms.

#### RECOMMENDATIONS:

Based on the survey findings, the following recommendations can be made:

1. Enhance online presence and engagement with online food delivering portals.
2. Streamline and optimize delivery operations to ensure prompt and efficient service.
3. Utilize data analytics to gain insights and tailor offerings to customer preferences.
4. Foster customer loyalty through personalized experiences and loyalty programs.
5. Stay updated with industry trends to remain competitive and make informed decisions.

Implementing these recommendations will help quick service restaurants (QSRs) in Baner and Balewadi maximize the benefits of online food delivering portals and stay ahead in the evolving food service industry.

#### CONCLUSION:

In conclusion, the overall study reveals that a majority of quick service restaurants (QSRs) in the Baner and Balewadi areas are utilizing online food delivering portals. The findings highlight the significant influence of various factors on QSRs' decisions when opting for these portals. Specifically, competitiveness emerges as the primary driver for a majority of QSRs (53%), emphasizing the importance of staying competitive in the market. Additionally, a notable percentage of QSRs (23%) prioritize driving higher revenue, recognizing the potential financial benefits of partnering with online portals. Furthermore, a significant proportion of QSRs (16%) place importance on leveraging social media platforms to expand their customer base. These conclusions underscore the diverse influences that shape QSRs' choices, including competitiveness, revenue generation, and the utilization of social media platforms for business growth. Overall, the study highlights the significance of online food delivering portals for QSRs in Baner and Balewadi, shedding light on the factors that drive their adoption and success in the dynamic food service industry.

#### AUTHOR'S CONTRIBUTION:

Both authors collaborated closely, making substantial contributions to the study, including designing the research, collecting and analyzing data, and jointly writing the paper, resulting in a comprehensive and valuable research contribution.

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#### ACKNOWLEDGMENT:

We would like to express our heartfelt gratitude and appreciation to the owners and managers of the quick service restaurants (QSRs) who participated in this research study. Their valuable insights and cooperation were instrumental in the successful completion of this project. The support, guidance, and encouragement provided by numerous individuals and organizations have been invaluable throughout this incredible journey.

#### CONFLICTS OF INTEREST:

We would like to inform you that this research work is free from any conflicts of interest

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**A STUDY OF FINANCIAL PERFORMANCE ANALYSIS: A CASE OF KSB LTD.**

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**Prof. Dr. Manisha Khaladkar**

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**ABSTRACT**

The study titled the financial performance analysis a company. The objective of the paper is to study the existing financial position of a company through associating the current financial performance with last three years. The data used in this study is secondary data which is collected through annual reports. The data that used in this study, comparative balance sheet, common size balance sheet, comparative balance sheet analysis. Analytical research method is used for analysis and a critical evaluation of the data. The study of financial performance on the company has revealed the great deal of their various financial aspects for four years. The comparative analysis unlocks the overall performance methodology. The company has succeeded in maintaining a reasonable profitability position.

**KEYWORDS:** Financial Performance, Comparative statement, Common size statement.

**INTRODUCTION**

Financial performance analysis is the process of identifying the financial strengths and weaknesses of the organization by properly establishing the relationship between the item of Balance Sheet and Profit and Loss Account. It also helps in short term and long term forecasting and growth can be identified with the help of financial performance analysis. The analysis of financial statement is a process of evaluating the relationship between the component parts of financial statement to obtain a better understanding of the organization position and performance. This analysis can be undertaken by management of the firms or by parties outside the namely, owners, creditors, investors.

Financial statement refers mainly three basic statements: Balance Sheet, Income Statement and Cash Flow Statement.

**LITERATURE REVIEW**

- **Sheela christina (2017)** carried out the study on Financial performance of Wheels India Limited Chennai. This study is depend upon secondary data. For this study researcher studied on last 5 years data and used financial tools like ratio analysis, comparative balance sheet, DuPoint analysis and also used statistical tools such as trend analysis and correlation. Profitability ratios indicates a decrease in the profit level, utilization of fixed assets and working capital in the last financial year. So, the company can take necessary steps to improve turnover and profit. This study shows that the financial performance is satisfactory.
- **Kanagavalli. G & Devi R.S. (2018)** study focused on Financial Performance of selected automobile companies. The purpose of this study is to evaluate and compare the financial performance of selected companies. The financial performances







evaluated for the period of 5 years from 2013-2017 by using ratio analysis. The study found that there is the positive strong relationship of liquidity ratio. The Profitability Ratios of Hero Motocorp is higher than other automobile companies. It shows Hero Motocorp earned high profit and it is plus point for the company. After analysing all the aspects, this research shows that Bajaj Auto and TVS Motors are satisfactory but Hero Motocorp sustains a good position in the market.

- **Muthusamy. A & Karthika. S (2019)** carried out a study on financial performance of selected cement companies in India to evaluate the liquidity and profitability of two selected cement firms, their paper on convenience sampling method was treated. The study analyses the financial performance of two major Cement companies via., Ultra Tech Cement Limited and Shree Cement Limited. Descriptive and correlation approach used as statistical instruments for this study. This study suggests that in the two companies profitability position is fulfilled, but the liquidity position is not fulfilled.
- **Andal. V & Suganya. S & et al (2020)** the study on Financial Performance Analysis of Puma, manufacturer of sports apparels and sports equipment company. The analysis was done by using vertical and horizontal ratio, financial ratios. These analysis and ratios will help the company for the future growth and to improve the company market share. This study concludes that the company is performing well and will make profit and revenues for the coming financial years. The current ratio of PUMA has reduced and in all other contexts, the financial position of puma is satisfactory.
- **Chandrasekaran. S (2021)** Study focused on the financial performance Analysis of XI Dynamics India Private Limited. This company is providing Housing loans and mortgage loans to affordable segments. This study is to analyze the financial position, identifying the strength and weakness of the firm and also identify the difficulty of the processing in mortgage. Researcher has used secondary data and various application tools to evaluate the financial performance like ratio analysis, and comparative balance sheet. And the study concluded that the company's financial performance is very good and also Company trying to generate more funds from other sources in order to expand the business.

#### OBJECTIVES OF STUDY

1. To assess a financial performance of a company through common size statement analysis
2. To know the efficiency of financial operations by using comparative statement analysis
3. To analyze the financial position of a company through cash flow statement.

#### LIMITATIONS OF THE STUDY

The analysis is fully based on secondary data and hence the accuracy of data is the main concern.

#### RESEARCH METHODOLOGY

Research is the systematic process in which the researcher collects the information & analyses it for own understanding. Research helps to increase the knowledge about the







particular topic. This study analyzed the Financial Performance of the company & also help to understand the financial structure and position of the KSB Limited. The financial study helps us to analysis the financial background and the utilization of the income earned.

### DATA COLLECTION

Data collection is a process of organizing the data. This study is entirely based on secondary data collected Annual financial Statements of the KSB Limited. In addition, data has been collected from published sources as well as websites, management, & research papers etc. Data collection is done for analyzing and interpreting.

The secondary data can be collected through following ways:

1. Internet
2. Books
3. Journals

### SAMPLE SIZE

Financial statements of 2018 to 2021

### TOOLS USED

1. Common size statement analysis
2. Comparative statement analysis
3. Cash flow statement

### COMMON SIZE INCOME STATEMENT ANALYSIS

Table No. 2 Common Size Income Statement

For Year March 2018 to March 2021.

(All amounts are in ₹ million, unless otherwise stated)

PARTICULARS	Mar-18 (MILLION)	%	Mar-19 (MILLION)	%	Mar-20 (MILLION)	%	Mar-21 (MILLION)	%
<b>INCOME</b>								
REVENUE FROM OPERATION (GROSS)	-	-	-	-	-	-	-	-
LESS: EXCISE/SERVICE TAX/ OTHER LEVIES	-	-	-	-	-	-	-	-
<b>REVENUE FROM OPERATION</b>	<b>10930.66</b>	<b>100</b>	<b>12939.08</b>	<b>100</b>	<b>12081.15</b>	<b>100</b>	<b>14972.91</b>	<b>100</b>

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(NET)								
<b>TOTAL OPERATING REVENUES</b>	<b>10930.66</b>	<b>100</b>	<b>12939.08</b>	<b>100</b>	<b>12081.15</b>	<b>100</b>	<b>14972.91</b>	<b>100</b>
OTHER INCOME	267.1	2.4	256.31	1.98	322.99	2.67	363.77	2.42
<b>TOTAL REVENUE</b>	<b>11197.76</b>	<b>102</b>	<b>13195.39</b>	<b>102</b>	<b>12404.14</b>	<b>103</b>	<b>15336.68</b>	<b>102</b>
<b>EXPENSES</b>								
COST OF MATERIAL CONSUMED	5203.55	48	6015.78	46.5	5512.66	45.6	7212.55	48.2
OPERATING AND DIRECT EXPENSES	0	0	0	0	0	0	0	0
PURCHASE OF STOCK IN TRADE	783.68	7.17	1062.39	8.21	970.63	8.03	1353.31	9
CHANGES IN INVENTORIES OF FG, WIP & STOCK IN TRADE	-336.54	-3.08	-95.11	-0.74	-278.11	-2.3	-641.61	-4.3
EMPLOYEE BENEFIT EXPENSES	1539.66	14.09	1778.89	13.75	1862.43	15.42	2153.75	14
FINANCE COST	37.49	0.34	53.12	0.4	33.94	0.28	50.4	0.3
DEPRECIATION AND AMORTIZATION EXPENSES	396.67	3.63	472.23	3.63	417.7	3.46	435.34	2.9
OTHER EXPENSES	2456.52	22.47	2674.7	20.67	2335.55	19.33	2800.15	19
<b>TOTAL EXPENSES</b>	<b>10081.03</b>	<b>92.22</b>	<b>11947</b>	<b>92.33</b>	<b>10854.8</b>	<b>89.85</b>	<b>13363.89</b>	<b>89</b>
<b>PROFIT/LOSS BEFORE</b>								

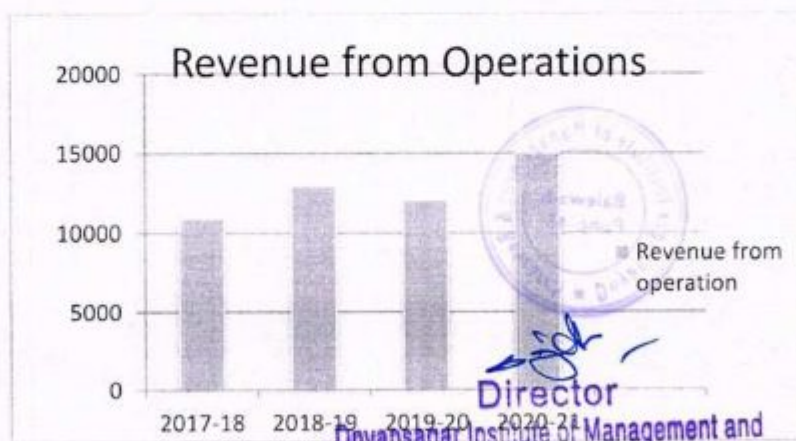




EXCEPTIONAL, EXTRAORDINARY ITEMS AND TAX	1116.73	10.22	1248.39	9.65	1549.34	12.82	1972.79	13
EXCEPTIONAL ITEMS	0	0	127.42	0.98	0	0	0	0
PROFIT /LOSS BEFORE TAX	1116.73	10.22	1375.81	10.63	1549.34	12.82	1972.79	13
TAX FOR EARLIER YEARS	0	0	0	0	0	0	0	0
TAX SETTLEMENT RELATING TO PREVIOUS YEAR.	0	0	0	0	190.38	1.58	0	0
TOTAL TAX EXPENSES	376.47	3.44	397.56	3.07	575.96	4.77	506.77	3.38
PROFIT/LOSS AFTER TAX AND BEFORE EXTRAORDINARY ITEMS	740.26	6.77	978.25	7.56	973.38	8.06	1466.02	9.79

CHART NO 1:- REVENUE FROM OPERATION IN MILLION

PARTICULARS	2017-2018	2018-2019	2019-2020	2020-2021
REVENUE FROM OPERATIONS	10930.66	12939.08	12081.15	14972.91



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**COMMON SIZE INCOME STATEMENT  
FOR YEAR MARCH 2018 TO MARCH 2021.  
INTERPRETATION**

- Revenue from operations are fluctuating.
- In expenses cost of material consumed is increased from the year 2018 to 2021 from 5203.55 to 7212.55. In the year 2020 it declines 5512.66 and in the year 2021 it again increased 7212.55 with the percentage 48.17.
- Employee benefit expenses increased gradually from the year 2018 to 2021 that is, 1539.66 to 2153.75. Finance costs are fluctuating.
- Overall the KSB Limited Company is performing well in the market from 2018 to 2021.

**COMMON SIZE BALANCE SHEET STATEMENT ANALYSIS**

Table No.3 Common Size Balance Sheet Statement

For Year March 2018 To March 2021.

(All amounts are in ₹ million, unless otherwise stated)

Particulars	31.03.2018		31.03.2019		31.03.2020		31.03.2021	
	Amount (Million)	%	Amount (Million)	%	Amount (Million)	%	Amount (Million)	%
<b>Equity &amp; Liability</b>								
<b>Shareholder's Funds</b>								
Share capital	348.08	2.9	348.08	2.5	348.08	2.31	348.08	2.23
Other Equity	6784.47	56	7459.06	54	8116.24	54.3	9292.78	59.5
<b>I. Non-current Liabilities</b>								
Lease liabilities	0	0	0	0	8.98	0.1	20.34	0.13
Provisions	365.79	3	424.4	3.1	453.51	3.03	516.67	3.31
Total non-current liabilities	365.79	3	424.4	3.1	462.49	3.09	537.01	3.44
<b>II. Current Liabilities</b>								
<b>Financial liabilities-</b>								
(a) Borrowings	434.26	3.6	600	4.3	600	4.01	0	0
(b) Lease liabilities	0	0	0	0	6.76	0.05	9.55	0.06





(c) Trade payables									
- Total outstanding dues of micro enterprises and small enterprises	21.3	0.2	12.24	0.1	24.78	0.17	212.05	1.36	
- Total outstanding dues of creditors other than micro enterprises and small enterprises	2155.73	18	2410.56	17	2602.78	17.4	2579.45	16.5	
			2543.05	18					
Other current liabilities	971.34	8.06	1432.17	10.3	1453.74	9.72	1261.71	8.07	
			1323.26	9.53					
Provisions	412.02	3.42	466.35	3.36	493.32	3.3	540.75	3.46	
			451.62	3.25					
Current tax liabilities (net)	15.19	0.13	13.37	0.1	184.38	1.23	17.64	0.11	
Total current liabilities	4556.01	37.8	5646.76	40.7	6033.15	40.3	5448.3	305	
Total Liabilities	4921.8	40.8	6071.16	43.8	6495.64	43.4	5985.31	38.3	
<b>Total Equity and Liabilities</b>	<b>12054.35</b>	<b>100</b>	<b>13878.3</b>	<b>100</b>	<b>14959.96</b>	<b>100</b>	<b>15626.17</b>	<b>100</b>	
<b>I. Non-Current Assets</b>									
Fixed Assets-Property, plant and equipment	3191.94	26.5	3056.74	22	2907.53	19.4	2819.53	18	
Right-of-use assets	0	0	0	0	262.92	1.76	273.43	1.75	
Capital Work-In-Progress	41.38	0.34	344.9	2.49	251	1.68	391.76	2.51	
Other Intangible asset	18.66	0.15	16.11	0.12	13.71	0.09	13.41	0.09	
Non-Current Investments	63.15	0.52	63.15	0.46	63.15	0.42	63.15	0.4	
Trade receivables	99.34	0.82	130.89	0.94	166.41	1.11	145.36	0.93	
Loans	67.87	0.56	80.97	0.58	81.27	0.54	122.27	0.78	
Deferred tax	161.37	1.34	119.86	1.86	168.14	1.12	219.72	1.41	

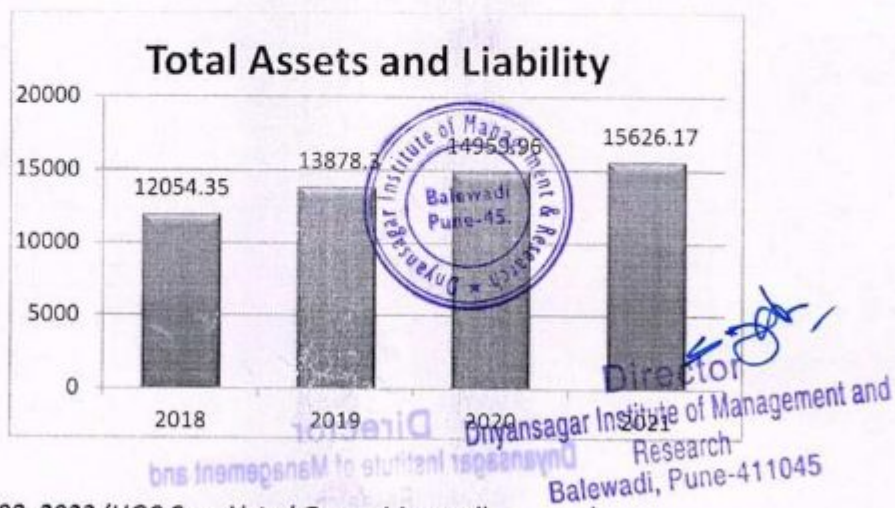






assets								
Assets for current tax (net)	141.49	1.17	155.48	1.12	125.64	0.84	160.98	1.03
Other Non-Current Assets	210.96	1.75	40.57	0.29	8.07	0.05	214.59	1.37
Total non-current assets	3996.16	33.2	4008.05	28.9	4047.84	27.1	4424.2	28.3
<b>II. Current Assets</b>								
Inventories	3030.23	25	3248.43	23	3608.75	24	4230.84	27.1
Financial assets-								
(a) Trade Receivables	2907.15	24	2961.79	21	2667.59	18	2779.83	17.8
(b) Cash And Cash Equivalents	119.81	1	483.51	3.5	870.34	5.8	565.39	3.62
(c) Bank balances other than (b) above	1262.58	10	2416.5	17	3162.83	21	2979.65	19.1
(d) Loans	11.98	0.1	21.55	0.2	18.73	0.1	27.08	0.17
(e) Other financial assets	48.1	0.4	105.63	0.8	102.85	0.7	101.24	0.65
Other Current Assets	678.34	5.6	632.84	4.6	481.03	3.2	517.94	3.31
Total Current Assets	8058.19	67	9870.25	71	10912.12	73	11201.97	71.7
<b>Total Assets</b>	<b>12054.35</b>	<b>100</b>	<b>13878.3</b>	<b>100</b>	<b>14959.96</b>	<b>100</b>	<b>15626.17</b>	<b>100</b>

CHART NO 2:- TOTAL ASSETS AND LIABILITIES IN MILLION







**INTERPRETATION**

- Share capital is constant.
- Current liabilities from 2018 to 2020 was increased from 4556.01million to 6033.15 million but in 2022 it's decreased up to 5448.3 million.
- A total current asset was increase year by year therefore working capital is also increase.

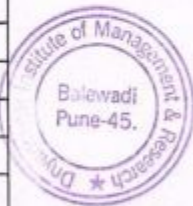
**COMPARATIVE BALANCE SHEET STATEMENT ANALYSIS**

Table No. 4 Comparative Balance Sheet Statement

For Year March 2021 And March 2020.

(All amounts are in ₹ million, unless otherwise stated)

PARTICULAR	31.03.2020 (P.Y)	31.03.2021 (C.Y)	ABSOLUTE CHANGE(C- P)	% CHANGE (A.C/P*100)
<b>Equity &amp; Liability</b>				
<b>Shareholder's Funds</b>				
Share capital	348.08	348.08	-	-
Other Equity	8116.24	9292.78	1176.54	14.5
<b>I. Non-current Liabilities</b>				
Lease liabilities	8.98	20.34	11.36	127
Provisions	453.51	516.67	63.16	13.93
Total non-current liabilities	462.49	537.01	74.52	16.11
<b>II. Current Liabilities</b>				
<b>Financial liabilities-</b>				
(a) Borrowings	600	0	-600	-100
(b) Lease liabilities	6.76	9.55	2.79	41.27
(c) Trade payables				
- Total outstanding dues of micro enterprises and small enterprises	24.78	212.05	187.27	756
- Total outstanding dues of creditors other than micro enterprises and small enterprises.	2602.78	2579.45	-23.33	-0.9
Other current liabilities	1453.74	1261.71	-192.03	-13.21
Provisions	493.32	540.75	47.43	9.61
Current tax liabilities (net)	184.38	17.64	-166.74	-90.43
Total current liabilities	6033.15	5448.3	-584.85	-9.69
Total Liabilities	6495.64	5985.31	-510.33	-7.86
<b>Total Equity and Liabilities</b>	<b>14959.96</b>	<b>15826.17</b>	<b>666.21</b>	<b>4.45</b>
<b>I. Non-Current Assets</b>				







Fixed Assets-Property, plant and equipment	2907.53	2819.53	-88	-3.03
Right-of-use assets	262.92	273.43	10.51	4
Capital Work-In -Progress	251	391.76	140.76	56.08
Other Intangible asset	13.71	13.41	-0.3	-2.19
Non-Current Investments	63.15	63.15	-	-
Trade receivables	166.41	145.36	-21.05	-12.65
Loans	81.27	122.27	41	50.45
Deferred tax assets	168.14	219.72	51.58	30.68
Assets for current tax (net)	125.64	160.98	35.34	28.13
Other Non-Current Assets	8.07	214.59	206.52	256
Total non-current assets	4047.84	4424.2	376.36	9.3
<b>II. Current Assets</b>				
Inventories	3608.75	4230.84	622.09	17.24
Financial assets-(a) Trade Receivables	2667.59	2779.83	112.24	4.21
(b) Cash And Cash Equivalents	870.34	565.39	-304.95	-35.04
(c) Bank balances other than (b) above	3162.83	2979.65	-183.18	-5.79
(d) Loans	18.73	27.08	8.35	44.58
(e) Other financial assets	102.85	101.24	-1.61	-1.57
Other Current Assets	481.03	517.94	36.91	7.67
Total Current Assets	10912.12	11201.97	289.85	2.66
<b>Total Assets</b>	<b>14959.96</b>	<b>15626.17</b>	<b>666.21</b>	<b>4.45</b>
Trade receivables	166.41	145.36	-21.05	-12.65
Loans	81.27	122.27	41	50.45
Deferred tax assets	168.14	219.72	51.58	30.68
Assets for current tax (net)	125.64	160.98	35.34	28.13
Other Non-Current Assets	8.07	214.59	206.52	256
Total non-current assets	4047.84	4424.2	376.36	9.3
<b>II. Current Assets</b>				
Inventories	3608.75	4230.84	622.09	17.24
Financial assets-(a) Trade Receivables	2667.59	2779.83	112.24	4.21
(b) Cash And Cash Equivalents	870.34	565.39	-304.95	-35.04
(c) Bank balances other than (b) above	3162.83	2979.65	-183.18	-5.79
(d) Loans	18.73	27.08	8.35	44.58
(e) Other financial assets	102.85	101.24	-1.61	-1.57
Other Current Assets	481.03	517.94	36.91	7.67
Total Current Assets	10912.12	11201.97	289.85	2.66
<b>Total Assets</b>	<b>14959.96</b>	<b>15626.17</b>	<b>666.21</b>	<b>4.45</b>





**INTERPRETATION**

- The overall financial position of the company for the year (2020-2021) was satisfactory.

Table No.5 Comparative Balance Sheet Statement

For Year March 2020 And March 2019.

(All amounts are in ₹ million, unless otherwise stated)

PARTICULAR	31.03.2019 (P.Y)	31.03.2020 (C.Y)	ABSOLUTE CHANGE(C- P)	% CHANGE (A.C/P*100)
<b>Equity &amp; Liability</b>				
<b>Shareholder's Funds</b>				
Share capital	348.08	348.08	-	-
Other Equity	7459.06	8116.24	657.18	8.81
<b>I. Non-current Liabilities</b>				
Lease liabilities	0	8.98	8.98	0
Provisions	424.4	453.51	29.11	6.85
Total non-current liabilities	424.4	462.49	38.09	8.97
<b>II. Current Liabilities</b>				
<b>Financial liabilities-</b>				
(a) Borrowings	600	600	0	0
(b) Lease liabilities	0	6.76	6.76	0
(c) Trade payables - Total outstanding dues of micro enterprises and small enterprises - Total outstanding dues of creditors other than micro enterprises and small enterprises.	12.24  2410.56	24.78  2602.78	12.54  192.22	102.45  7.97
	2543.05		59.73	2.34
Other current liabilities	1432.17 1323.26	1453.74	21.57 130.48	1.5 9.86
Provisions	466.35 451.62	493.32	26.97 41.7	5.78 9.23
Current tax liabilities (net)	13.37	184.38	171.01	1279.05
Total current liabilities	5646.76	6033.15	386.39	6.84
Total Liabilities	6071.16	6495.64	424.48	6.99
<b>Total Equity and Liabilities</b>	<b>13878.3</b>	<b>14959.96</b>	<b>1081.66</b>	<b>7.79</b>
<b>I. Non-Current Assets</b>				
Fixed Assets-Property, plant and equipment	3056.74	2917.53	-149.21	-4.88
Right-of-use assets	0	262.92	262.92	0







Capital Work-In-Progress	344.9	251	-93.9	-27.22
Other Intangible asset	16.11	13.71	-2.4	-14.89
Non-Current Investments	63.15	63.15	0	0
Trade receivables	130.89	166.41	35.52	27.13
Loans	80.97	81.27	0.3	0.37
Deferred tax assets	119.24	168.14	48.9	41
Assets for current tax (net)	155.48	125.64	-29.84	-19.19
Other Non-Current Assets	40.57	8.07	-32.5	-80.1
Total non-current assets	4008.05	4047.84	39.79	0.99
<b>II. Current Assets</b>				
Inventories	3248.43	3608.75	360.32	11.09
Financial assets-(a) Trade Receivables	2961.79	2667.59	-294.2	-9.93
(b) Cash And Cash Equivalents	483.51	870.34	386.83	80
(c) Bank balances other than (b) above	2416.5	3162.83	746.33	30.88
(d) Loans	21.55	18.73	-2.82	-13.08
(e) Other financial assets	105.63	102.85	-2.78	-2.63
Other Current Assets	632.84	481.03	-151.81	-23.98
Total Current Assets	9870.25	10912.12	1041.87	10.55
<b>Total Assets</b>	<b>13878.3</b>	<b>14959.96</b>	<b>1081.66</b>	<b>7.79</b>

**INTERPRETATION**

- The comparative balance sheet of the company reveals during 2020, that there has been a decrease in the fixed assets of Rs.149.21 million which indicates sale of fixed assets. Other non-current assets, other current assets and other financial assets were decrease.

Table No.6 Comparative Balance Sheet Statement

For Year March 2019 And March 2018.

(All amounts are in ₹ million, unless otherwise stated)

PARTICULAR	31.03.2018 (P.Y)	31.03.2019 (C.Y)	ABSOLUTE CHANGE(C-P)	% CHANGE (A.C/P*100)
<b>Equity &amp; Liability</b>				
<b>Shareholder's Funds</b>				
Share capital	348.08	348.08	0	0
Other Equity	6784.47	7459.06	674.59	9.94
<b>I. Non-current Liabilities</b>				
Lease liabilities	0	0	0	0
Provisions	365.79	424.4	58.61	16.02
Total non-current liabilities	365.79	424.4	58.61	16.02
<b>II. Current Liabilities</b>				

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<b>Financial liabilities-</b>				
(a) Borrowings	434.26	600	165.74	38.17
(b) Lease liabilities	0	0	0	0
(c) Trade payables	21.3	12.24	-9.06	-42.54
- Total outstanding dues of micro enterprises and small enterprises				
- Total outstanding dues of creditors other than micro enterprises and small enterprises.	2155.73	2410.56	254.83	11.82
		2543.05	387.32	17.97
Other current liabilities	971.34	1432.17	460.83	47.44
		1323.26	351.92	36.23
Provisions	412.02	466.35	54.33	13.19
		451.62	39.6	9.61
Current tax liabilities (net)	15.19	13.37	-1.82	-11.98
Total current liabilities	4556.01	5646.76	1090.75	23.94
Total Liabilities	4921.8	6071.16	1149.36	23.35
<b>Total Equity and Liabilities</b>	<b>12054.35</b>	<b>13878.3</b>	<b>1823.95</b>	<b>15.13</b>
<b>I. Non-Current Assets</b>				
Fixed Assets-Property, plant and equipment	3191.94	3056.74	-135.2	-4.24
Right-of-use assets	0	0	0	0
Capital Work-In -Progress	41.38	344.9	303.52	733
Other Intangible asset	18.66	16.11	-2.55	-13.67
Non-Current Investments	63.15	63.15	0	0
Trade receivables	99.34	130.89	31.55	31.76
Loans	67.87	80.97	13.1	19.3
Deferred tax assets	161.37	119.24	-42.13	-26.11
Assets for current tax (net)	141.49	155.48	13.99	9.89
Other Non-Current Assets	210.96	40.57	-170.39	-81
Total non-current assets	3996.16	4008.05	11.89	0.3
<b>II. Current Assets</b>				
Inventories	3030.23	3248.43	218.2	7.2
Financial assets-(a) Trade Receivables	2907.15	2961.79	54.64	1.88
(b) Cash And Cash Equivalents	119.81	483.51	363.7	304
(c) Bank balances other than (b) above	1262.58	2416.5	1153.92	91.39
(d) Loans	11.98	21.55	9.57	79.88
(e) Other financial assets	48.1	105.63	57.53	119
Other Current Assets	67.84	632.84	-45.5	-6.71



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Total Current Assets	8058.19	9870.25	1812.06	22.49
<b>Total Assets</b>	<b>12054.35</b>	<b>13878.3</b>	<b>1823.95</b>	<b>15.13</b>

### INTERPRETATION

- The comparative balance sheet of the company reveals during 2018-19, that there has been a decrease in the fixed assets of Rs.149.21 million which indicates sale of fixed assets. Other non-current assets, other current assets and other financial assets were decrease.

### CASH FLOW STATEMENT ANALYSIS

Table No.7 Cash Flow Statement

For Year March 2021 And March 2020.

PARTICULAR	AS AT 31.03.2021 (MILLION)	AS AT 31.03.2020 (MILLION)
Cash flows from operating activities		
Profit before tax	1,972.79	1,549.34
Adjustments for :		
Depreciation and amortization expense	435.34	417.70
Net loss on disposal of property, plant and equipment	3.69	8.40
Finance costs	50.40	33.94
Interest income	(195.76)	(192.72)
Dividend from investment in associate	(26.83)	(32.71)
Fair value (gain) / loss in derivative financial instruments	5.64	(8.20)
Sundry credit balances and provisions no longer required, written back	(3.77)	(21.05)
Unrealised foreign exchange (gain) / loss	(11.92)	3.77
Allowance for doubtful receivables	<u>30.86</u>	<u>91.91</u>
	<u>287.65</u>	<u>301.04</u>
Operating profit before working capital changes	2,260.44	1,850.38
Adjustment for changes in working capital: (Increase) / decrease in operating assets:		
Inventories	(622.09)	(360.32)
Trade receivables	(103.69)	178.06
Loans	(49.35)	2.52
Other assets	(256.26)	159.75
Increase / (decrease) in operating liabilities:		
Trade payables	183.61	215.13
Other financial liabilities	47.76	53.25
Other liabilities	(192.03)	21.57
Provisions	<u>119.13</u>	<u>5.65</u>
	<u>(872.92)</u>	<u>275.61</u>



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Cash generated from operations		1,387.52	2,125.99
Income taxes paid		<u>(762.58)</u>	<u>(411.32)</u>
Net cash flows generated from operating activities (A)		624.94	1,714.67

Table No.8 Cash Flow Statement

For Year March 2019 And March 2018.

PARTICULAR	AS AT 31.03.2019 (MILLION)	AS AT 31.03.2018 (MILLION)
Cash flows from operating activities		
Profit before tax	1,375.81	1,116.73
Adjustments for :		
Depreciation and amortization expense	457.23	396.67
Net gain on disposal of property, plant and equipment [Refer note (ii) below]	(128.02)	(4.85)
Finance costs	53.12	37.49
Interest income	(128.60)	(95.15)
Dividend from investment in associate	(21.68)	(26.09)
Dividend from investment in subsidiary	(3.30)	(43.00)
Mark to market (gain) / loss on derivative contracts	9.60	(5.13)
Sundry credit balances and provisions no longer required, written back	(29.59)	(60.90)
Unrealised exchange (gain) / loss	(21.09)	9.51
Allowance for doubtful receivables	<u>(7.26)</u>	<u>(9.00)</u>
	<u>180.41</u>	<u>199.55</u>
Operating profit before working capital changes	1,556.22	1,316.28
Adjustment for changes in working capital: (Increase) / decrease in operating assets:		
Inventories	(218.20)	(553.86)
Trade receivables	(56.94)	(385.57)
Loans	(22.67)	4.29
Other assets	226.32	(115.54)
Increase / (decrease) in operating liabilities:		
Trade payables	404.99	456.80
Other financial liabilities	105.61	75.50
Other liabilities	351.73	458.34
Provisions	<u>27.94</u>	<u>(71.55)</u>
	<u>818.78</u>	<u>(131.59)</u>



  
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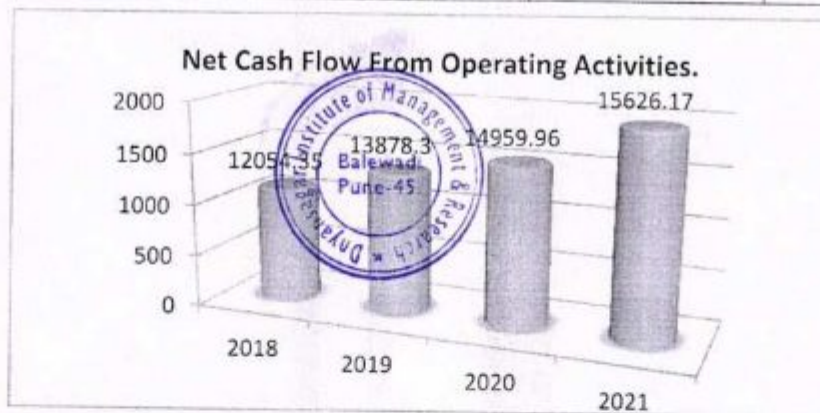
Cash generated from operations	2,375.00	1184.69
Income taxes paid	(353.53)	(408.90)
Net cash flows generated from operating activities (A)	2,021.47	775.79

**INTERPRETATION**

- From the above table no.7 cash flow from the operating activities is Rs. 1,972.79 Million from the year 2021 and 2020 is Rs. 1,549.34 that means operating activities are increase from previous year.
- Table no.8 cash flow from the operating activities is Rs. 1375.81 Million from the year 2019 and 2018 is Rs.1116.73 that means operating activities are decrease from previous year.

**CHART NO 3:- NET CASH FLOW FROM OPERATING ACTIVITIES**

Net cash flow from operating activities	2018	2019	2020	2021
Values (Million)	1116.73	1375.81	1549.34	1972.79



**FINDINGS**

Findings of the project are summed up as follows:

- Share capital is constant, but the company's revenue from operations was fluctuating.
- In expenses cost of material consumed and finance costs are fluctuating were fluctuating.
- Employee benefit expenses increased gradually from the year 2018 to 2021 that is, 1539.66 to 2153.75.
- Overall the KSB Limited Company is performing well in the market from 2018 to 2021.
- Company's working capital is increased. Current liabilities was increased every year except 2022 and total current assets were also increase every year.

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- The overall financial position of the company for the year (2020-2021) was satisfactory.

### CONCLUSION

On the basis of various techniques applied for the financial analysis of KSB Limited we can arrive at a conclusion that the financial position and overall performance of the company is satisfactory. Though the income of the company has increased over the period but not in the same pace as of expenses.

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## A study of non-interest income in private sector banks with special refers to ICICI bank

**Sanjay Mahadik and Dr. Manisha Khaladkar**

### Abstract

The study is focused on trends in non-interest income in private sector banks with special reference to ICICI Bank. The study is about the earning of non-interest income and its components in banks. The objective is to about, earnings on other income from the financial year 2011 to 2021 and its components ratio with other incomes and also, year to year growth for the year 2021 to 2022. It has been recommended and concluded to the bank, that other incomes, with their components, must be made visible and it should be mandatory by the regulatory authority for all the banks so that it can be referred to as a measure to check and updates the activities to enhance the business of the bank. And each branch manager has to do a survey in his area with regard to the potential of doing business to earn other incomes in that respective area.

**Keywords:** Non-interest income, interest income, CAGR, YoY growth rate

### Introduction

#### Financial Management in Banking Industry

Finance is the life blood of trade, commerce and industry. Nowadays, the banking sector acts as the backbone of modern business. Development of any country mainly depends upon the banking system. Banks developed around 200 years ago. The banking sector plays a crucial role in the economic development of a nation. A sound, efficient, effective, vibrant, and innovative banking system stimulates economic growth by mobilizing savings on a massive scale and efficiently allocating resources for productive as well as consumption purposes.

The wave of diversification became apparent in the Indian banking sector in the eighties and nineties. The reforms opened areas like investment in banking, leasing, merchant, banking, and factoring, hire purchase and mutual funds for the commercial banks through the setting up of separate subsidiaries. As a result, there has been a manifold interest amongst foreign banks also to expand their operations in India.

Commercial banks being financial institution performs diverse types of functions. It satisfies the financial needs of the sectors such as agriculture, industry, trade, communication, etc. That means they play a very significant role in the process of economic social needs. The Indian banking industry has been steadily shifting away from traditional sources of revenue-generating business like loans and advances to non-traditional activities that generate fee income, service charges, trading revenue, and other types of NII. Not only the banks in the private sector are making headway into diversifying their operations, but the public sector banks are also in the lead in their operations in a competition.

Diversification has opened the doors for commercial banks to earn fee income from investment banking, merchant banking, insurance agency, securities brokerage, and other non-traditional financial services. And banks' motives to diversify as synergy economic motive, managerial motive, value maximization motive, increased market power motive, and capital strength and risk diversification motive.

#### Types of bank income

There are two broad sources of bank income or revenues. One is Interest Income or Fund Based Income and the second is, Non-Interest Income or Non-fund Based Income or which comes under the heading other income.

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### Interest income/fund-based income/other income in banks

Banks sometimes keep their cash in short-term deposit investments such as certificates of deposits with maturities up to twelve months, saving accounts and money market funds. The cash placed in these accounts earns interest for the business, which is recorded on the income statement as interest income. For others such as insurance companies and financial institutions that generate profit by investing the money it holds for policyholders into interest-paying bonds, it is a crucial part of the business.

#### Meaning

"Interest income is generated over the life of loans that have been securitized in structures requiring financing treatment (as opposed to sale treatment) for accounting purposes; loans held for investment; loans held for sale; and loans held for securitization.

"Interest income is generated from what is known as „the spread „. The spread is the difference between the interests a bank earns on loans extended to customers. Corporate etc. and the interest paid to depositors for the use of their money. It is also earned from any securities that the banks own such as treasury bills or bonds."

#### Components of interest/fund-based income

Main components of Interest/ Fund Based Income are,

#### Income from the lending of money

Generally lending money refers to disposing of the money or property with the expectation that the same thing will be returned. In other words, lending of money is the transfer of securities to a borrower (usually so the borrower can pay back a short-term liability), in return for a fee. The borrower agrees to replace them in due course with identical securities and the lender risks/returns of the securities in the meantime.

Income from Investment (SLR) Every bank is required to maintain at the close of business every day, a minimum proportion of their net demand and time liabilities as liquid assets in the form of cash, gold and unencumbered approved securities. The ratio of liquid assets to demand and time liabilities is known as Statutory Liquidity Ratio (SLR). A bank's leverage position to pump more money into the economy.

#### Non-interest income/non-fund-based income/fee-based income

In the face of declining net interest margins, depository institutions have entered new product areas over the past two decades, moving from traditional lending to the areas that generate Non- Fund Based Income. The change is of importance for financial stability. The more unstable is a bank's earnings stream, the riskier the institution is. The conventional wisdom in the banking industry is that earnings from fee-based products are more stable than loan-based earnings and those fee-based activities reduce bank risk via diversification.

#### Meaning

1. "Non-Fund Based Income is earned by providing a variety of services, such as trading of securities, assisting companies to issue new equity financing, securities omissions and wealth management, sale of

land, building, profit and loss on revaluation of assets etc."

2. "Bank and creditor income derived primarily from fees. Examples of non-interest income include deposit and transaction fees, insufficient funds (NSF) fees, annual fees, monthly account service charges, inactivity fees, check and deposit slip fees, etc. Institutions charge fees that provide non-interest income as a way of generating revenue and ensuring liquidity in the event of increased default rates."

#### Components of non-interest/non-fund-based income

The main components of Non-Interest/Non-Fund Based Incomes are,

#### Income on remittance of business

Apart from accepting deposits and lending money, Banks also carry out, on behalf of their customers the act of transfer of money -both domestic and foreign. From one place to another. This activity is known as "remittance business". Banks issue Demand Drafts, Banker's Cheques, Money Orders Etc. for transferring money. Banks also have the facility of quick transfer of money also known as Telegraphic Transfer.

For Example, In the Remittance business, Bank 'A' at place 'a' accepts money from customer 'C' and makes arrangements for payment of the same amount of money to either customer 'C' or his "order" i.e. a person or entity, designated by 'C' as the recipient, through either a Branch of Bank 'A' or any other entity at place 'b'. In return for having rendered this service, the Banks charge a pre-decided sum known as an exchange or commission, or service charge. This sum can differ from bank to bank. This also differs depending upon the mode of transfer and the time available for affecting the transfer of money. The Faster the mode of transfer the higher the charges. All banks are eager to go for fee-based activities to a large extent with various sources of income.

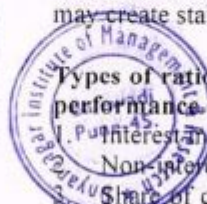
#### The structure of Non-interest income is

1. Commission And Brokerage
2. Sale of Investment
3. Sale of Land Building
4. Exchange Transaction
5. Income from E-Delivery Channels
6. Misc. Income

It is, therefore, important to examine to what extent fee-based income contributes to total income. These days, banks are competing on the basis of fee-based activities by launching innovative products or services. Non-interest income is a vital part of the total income of the banks and it may create stability in bank income.

#### Types of ratios are used to know the noninterest income performance of the study banks are

1. Interest income to total income ratio
2. Non-interest income to total income
3. Share of commodities exchange and brokerage to other income
4. Investment and sales to other income
5. Bank exchange transactions to other income



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### Objective of the study

1. To study the strategies and guidelines for other incomes to banks by the Reserve Bank of India (RBI)
2. To study the bank's Compound Annual Growth Rate (CAGR) of other incomes of the Private Sector Banks – ICICI bank from 2011 to 2021 financial year.
3. To study the year-to-year growth rate of other incomes of the Private Sector Banks for the financial year 2021 to 2022.
4. To analysis the Fee-based income earned by Private Sector banks.
5. To study and analyze the ratio of interest income and non-interest income to net income by the respective studied bank.

### Need of the study

- In India banks like public sector banks are in the evolutionary stage then the private sector banks so, it become important and need to study more on better business to win the competitive market and need to study how better an existing bank customer can be served in more efficient manner.
- Nowadays banks are transforming, their thinking process is changing from traditional banking to non-traditional banking i.e., concentrating more on secondary functions of the bank by providing additional financial products to existing customers which will give them rise in the fee-based income / other income.

It needs to be understood that it takes a great deal of time, effort and teamwork to successfully cross-sell beyond the traditional bank product set. Credibility and motivation are very important aspects. The staff members interacting with the customers need to have expertise on the subject and help the client to understand and get the right product.

### Research methodology

- The study is carried out on secondary data.
- The bank's Compound Annual Growth Rate (CAGR) was calculated for the financial year from 2011 to 2021 financial year, for Private Sector Banks.
- Secondary data is collected from Journals, Magazines, Annual Reports of studied banks, Articles, Research theses, Publications, and Internet resources.
- Information on banks and RBI strategies towards cross-selling business, financial reports and financial products
- To find out the year-to-year growth rate, of each selected bank with respect to income from other sources (non-interest income or fee-based income), we have calculated the CAGR from the financial year 2005-2010 and also calculated the rations" of each individual source of other incomes compared with total income.

### Literature reviews

1. The article, by R.K. Uppal, director of ICCSR, is an attempt to study the "trends in non- interest income". This article talks about the parameters like, interest and non-interest income as a percentage to total income. The non-interest income components are exchange and brokerage, sale in investment and exchange transaction.

On the basis of these parameters the study concluded that interest income is continuously declining due to deregulation in interest rates and non-interest income is rising. Among the non-interest income components, commodity exchange and brokerage witnessed a large share, while exchange transactions witnessed a meager part. The paper also gives some ways and means to bring stability to the total income.

2. The article by Harpeet Singh an officer in the Bank of India talks about "banks non-interest income". According to this study, the banks function on deposits and lending interest rates which is a matter of concern to gross interest income. The non-interest income sources are income from selling services, commission, exchange and brokerage, net profit sale of investments, land or building and other assets, foreign exchange transactions, income earned by way of dividends and miscellaneous income. The author also studied about the growth trends of NII for each of the four categories of Indian banks – Public Sector Banks, Old Private Sector Banks, New Private Sector Banks, and Foreign Banks. The data has been compiled and analyzed by percentage, and by computing compounded average growth rate (CAGR) for the years 2004 to 2008 to understand the pace and pattern of growth in NII. The author has concluded that the public sector banks and private sector banks need to concentrate more on increasing revenues through non-interest incomes. One of the suggestions given by him is for schedule 14 of the standard format of the balance sheet where a separate head, namely "income from cross-selling of financial products" should be made mandatory by the regulator.
3. "Income Diversification in the Banking Sector and Earnings Volatility: Evidence from Kenyan Commercial Banks". By AJosephat Mboya Kiweu (2012). This paper investigated, whether diversification of income sources for Kenyan banks leads to better earnings and reduced the systemic risks. It has been identified that, these banks are started concentrating, toward fees based income activities, for better earning. The study focuses on banks primary income sources of interest and noninterest / fee based income. Such as investment banking and insurance services. It has been identified that, the income diversification in Kenyan banking industry has been improved. It was also established that bigger banks are more diversified than small banks and tend to have higher returns. And the study assesses the volatility of the two primary streams of revenue and consequently checked if non-interest income could stabilize total operating income. The findings were clear that non-interest income is much more volatile than interest income as observed over the sample period. The results show a push for Kenyan banks to diversify their revenue stream.

### Data Analysis

- Reserve Bank of India has given guidelines to all banks in India for encouraging the banks to earn fee-based income to stabilize the profits of the banks under Para-Banking activities or Cross-Selling business.

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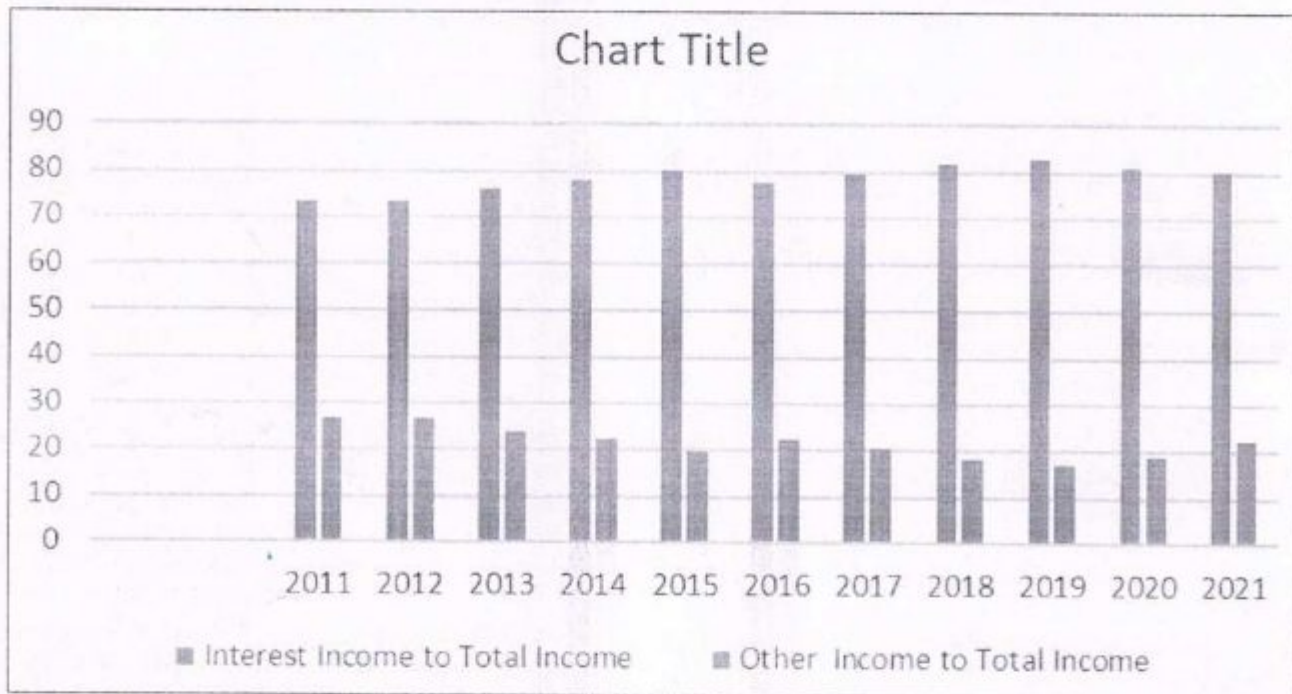
- Know Your Customer norms (KYC) / Anti – Money Laundering (AML) standards / Combating of financing of Terrorism (CFT) are some norms/standards that are given by the RBI to all other banks in India to follow at the time of cross-selling business of non-interest income to total income for public sector banks

**Other income from ICICI bank**

The study is about the financial performance of the private sector banks with respective to Non-Interest Income ratios and it also shows the detailed study about trends in non-interest incomes earned by the studied banks.

**Table 1: Interest Income to Total Income**

Year	Interest Income to Total Income	Other Income to Total Income
2011	73.37	26.63
2012	73.45	26.55
2013	76.05	23.95
2014	77.75	22.25
2015	80.35	19.65
2016	77.47	22.53
2017	79.62	20.38
2018	81.72	18.28
2019	82.76	17.24
2020	80.89	19.1
2021	80.13	22.51



**Fig 1: Shows Interest Income to Total Income and Other Income to Total Income**

Interest income to total income % of ICICI bank earnings averagely is 78.42% which is a good percentage, whereas

non-interest income averagely 21.58 percentage.

**Table 2: Ratios of Components of Other Income**

	Income on sale of commodities to other income	Investment, Land, Building to other income	Bank Exchange Transactions to Other Income
2011	56.23	15.99	9.21
2012	60.24	15.05	9.49
2013	62.51	16.1	9.3
2014	63.63	21.34	1.25
2015	73.99	23.68	0.11
2016	64.6	7.31	14.79
2017	82.95	3.27	13.79
2018	72.44	4.42	16.78
2019	65.44	6.77	15.97
2020	60.49	4	7.52
2021	57.32	12.73	12.51

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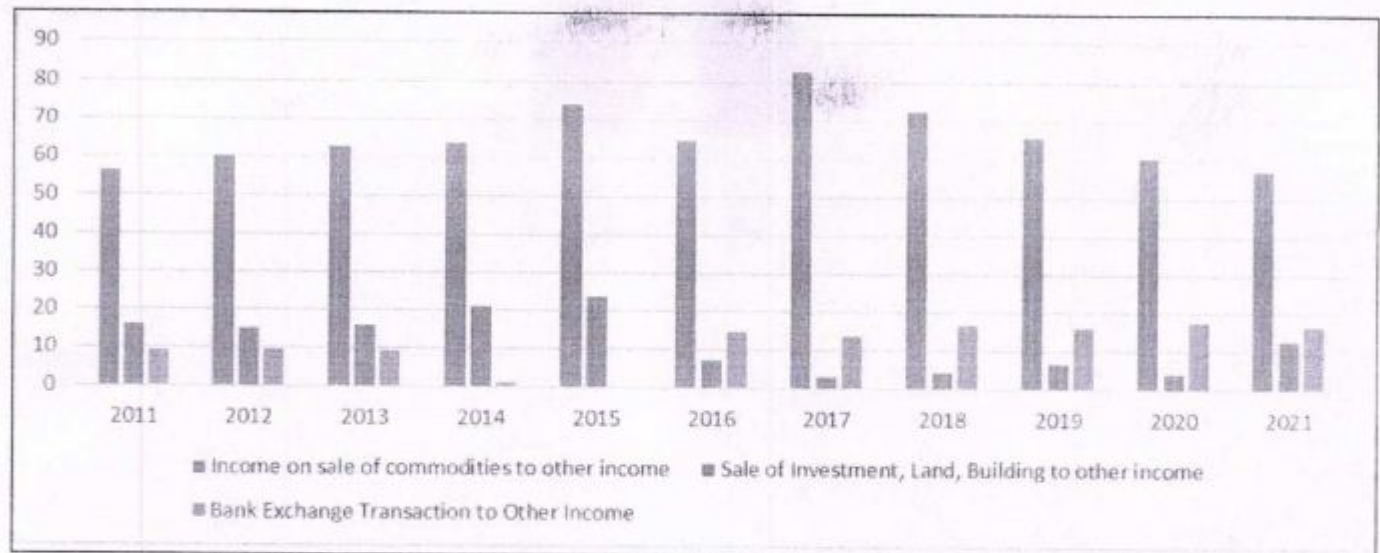


Fig 2: Ratios of Components of Other Income

ICICI Bank majorly concentrate on other income through sale of commodities with an averagely 65.44 percentage out of total other income whereas sale of investment, land etc is

an averagely 13.20 percentage, these type of service, plays a major role to play to increase in noninterest income

Table 3: Compound Annual Growth Rate (CAGR) and Year To Year Growth Rate for the Financial Year 2021 – 2022

BANK	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	CAGR	YOYG 15
ICICI	3416.23	5036.62	8878.85	8117.76	7279.43	6647.89	7502.76	8345.7	10427.87	12176.13	15323	21.59	25.84
	26.6	26.7	23.4	22.3	20.7	22.1	20.38	18.28	17.21	19.1	19.87	21.59	25.84

The annual growth rate of the ICICI bank is 21.59% and it has very good increase in year-to-year growth rate with 25.84%.

### Findings

It is found that ICICI bank has very good hold by earning interest income but this also shows that it is also concentrating on earning increase through other incomes, which helps them to be in the present competitive market.

### Conclusion

The results of this study show that non-interest income is positively related to performance and risk because the increase in non-interest income increases both performance and risk. The non-interest income is higher for private banks while comparing with other sector banks. Income from brokerage and service fees contributes more to non-interest income than other non-interest income sources for public and private sector banks whereas, for foreign banks, forex transactions play a major role in contributing to non-interest income. The outcome of the study informs about different bank groups' extent of non-interest income and how that benefited or affected the bank groups' performance and risk. The stakeholders such as bankers, Reserve bank of India, customer, rating agencies, etc. may be benefited from this study because this study may help concerned authorities to draw certain framework and policies relating to non-interest income exposure.

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# A Study on Long-Term Impact of Mergers and Acquisitions on Acquirers' Shareholders Systematic Risk with Reference to Healthcare Sector in India: A Comprehensive Analysis

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## ABSTRACT

In the extremely competitive corporate environment of today, mergers and acquisitions (M&A) have become more crucial for attaining inorganic growth. In particular, the healthcare industry's M&A patterns will be looked at in this article. M&A is viewed as a growth strategy, but organizations must perform well after the transaction to demonstrate their success. Despite an abundance of research, there is no conclusive proof that M&A impacts shareholders' wealth. The current study seeks to evaluate the effect of M&A deal announcement on the Acquiror's long-term shareholders' wealth of 56 M&A deals selected from the Indian healthcare sector using the Refinitiv Database for the years 2009 to 2019. According to the analysis, systemic risk (beta) of acquiring companies has increased since M&A. Additionally, the number of M&A transactions has significantly increased recently, and M&A-related regulations have changed. Analyzing the trend in merger and acquisition as well as the effect of M&A on the systematic risk of the acquiring firm is crucial. With the aid of paired sample t-test statistical techniques, the study assesses the long-term shareholders' wealth primarily using actual share price return and market models for Indian healthcare sector companies.

**Keywords:** Acquisitions, Healthcare Sector, Mergers, Systematic Risk.

## INTRODUCTION

Merger and acquisition (M&A) activity has been a common strategy employed by organizations in various industries to gain a competitive advantage and achieve growth (Andre' et al. 2004). In recent years, the healthcare sector has seen a significant increase in M&A activity, with numerous large-scale mergers taking place between healthcare providers, pharmaceutical companies, and medical device manufacturers (Gugler et al. 2003). As per Zulehner, C. (2003), this trend is expected to continue as organizations seek to expand their geographic reach, diversify their service offerings, and improve their financial performance.

However, as per Moeller et al. (2004), the impact of M&A on the healthcare sector is a topic of much debate, with proponents arguing that consolidation can lead to increased efficiency, improved quality of care, and better patient outcomes, while critics raise concerns about reduced competition, higher prices, and decreased access to care. Given the significant role that healthcare plays in society, it is crucial to understand the effects of M&A on this sector and to develop strategies to mitigate any negative consequences.

This research paper aims to examine the impact of M&A on the healthcare industry, specifically focusing on long term shareholder wealth. By analyzing existing literature and case studies, the paper will provide insights into the benefits and drawbacks of M&A in healthcare and offer recommendations for how organizations can navigate this complex landscape and whether M&A is a fruitful decision for the companies. Ultimately, this research will examine the long-term impact of M&A on shareholder wealth in the Healthcare industry and identify the key drivers that contribute to successful M&A transactions. This analysis can help investors, executives, and policymakers make informed decisions regarding M&A transactions and their impact on shareholder value.

## LITERATURE REVIEW

Mergers and acquisitions (M&A) are often employed by companies as a strategy to grow and expand their businesses.





However, the impact of M&A on shareholders' wealth in the long-term remains a contentious issue. While some studies suggest that M&A activity can lead to improved financial performance and increased shareholder value, others argue that it can have a negative impact on long-term shareholder wealth. In the healthcare sector, where M&A activity has been on the rise, this issue is of relevance.

Several studies have examined the impact of M&A on long-term shareholder wealth in the healthcare sector. According to a study by Anderson et al. (2014), M&A activity in the healthcare sector can have a positive impact on long-term shareholder value if the transaction is well-executed and creates synergies. The study found that healthcare M&A deals that created synergies, such as cost savings or revenue enhancements, had a positive impact on long-term shareholder value.

However, other studies have found that healthcare M&A deals can have a negative impact on long-term shareholder wealth. For example, a study by Kofoed and Bruun (2019) found that M&A deals in the healthcare sector often fail to create value for shareholders in the long-term. The study examined the impact of M&A on shareholder value in the Danish healthcare sector and found that, on average, M&A deals had a negative impact on shareholder value three years after the deal was completed.

Similarly, a study by Bishara and Sussman (2017) examined the impact of M&A on shareholder wealth in the US healthcare sector and found that M&A deals had a negative impact on long-term shareholder wealth. The study by Colvin, G. (2003) found that M&A deals resulted in lower returns for shareholders in the long-term, with the negative impact being more pronounced for deals that involved horizontal integration.

Despite these mixed findings, some studies suggest that certain factors can mitigate the negative impact of M&A on long-term shareholder wealth. For example, a study by Jiao et al. (2019) found that M&A deals that involved larger companies and deals that were financed with equity had a positive impact on long-term shareholder wealth. The study suggested that these factors helped to mitigate the risks associated with M&A deals, such as increased leverage and decreased profitability.

A study by Hughes, A et al (2001) examined the impact of M&A on long-term shareholder wealth in the Chinese healthcare sector. The study found that M&A deals that were motivated by market power, such as horizontal mergers, had a negative impact on long-term shareholder value.

However, M&A deals that were motivated by cost savings, such as vertical mergers, had a positive impact on long-term shareholder value. The study suggested that policymakers should consider the motives behind M&A deals when evaluating their impact on long-term shareholder value.

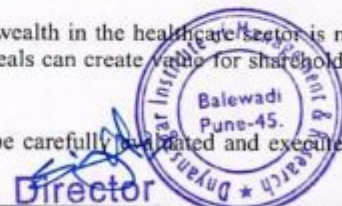
Another study by Berndt, E. (2001) examined the impact of M&A on long-term shareholder value in the pharmaceutical industry. The study found that M&A deals had a positive impact on long-term shareholder value, but only if they were focused on innovation. The study (Hoag, S.E. 2000) suggested that M&A deals that focused on innovation, such as acquiring a drug with potential for significant revenue growth, had a positive impact on long-term shareholder value.

In addition to the impact on long-term shareholder wealth, some studies have examined the impact of M&A on other stakeholders in the healthcare sector. For example, a study by Jandik, T. (2001) examined the impact of hospital mergers on prices and quality of care. The study found that hospital mergers led to higher prices for healthcare services but did not have a significant impact on the quality of care. The study by Singh, A. (1998) suggested that policymakers should consider the potential impact of M&A on prices when evaluating their impact on long-term shareholder value.

Overall, the literature suggests that the impact of M&A on long-term shareholder wealth in the healthcare sector is complex and depends on a variety of factors, such as the motives behind the deal, the type of merger, and the focus of the deal. While some studies have found a positive impact on long-term shareholder value, others have found a negative impact. Policymakers and healthcare organizations should carefully evaluate M&A deals in the sector, with a focus on creating synergies and mitigating risks.

In conclusion, the literature on the impact of M&A on long-term shareholder wealth in the healthcare sector is mixed. As per Mullins, D. (1983), while some studies suggest that well-executed M&A deals can create value for shareholders in the long-term, others have found a negative impact on shareholder wealth.

The mixed findings suggest that M&A deals in the healthcare sector should be carefully evaluated and executed, with a focus on creating synergies and mitigating risks.







**RESEARCH METHODOLOGY**

**Sample Selection and Period of Study:**

The sample M&A data is collected from Refinitiv from 2009 till 2019 for healthcare sector in India. Only public listed Acquiring companies have been analysed for Systematic Risk calculation Pre M&A & Post M&A. Market Model is used to calculate Systematic Risk (beta) using daily return data. The acquiror's systematic risk is measured using beta, which measures the sensitivity of the acquiror's stock returns to changes in the market returns. Daily data share price information is taken while calculating systematic risk for pre-M&A and Post M&A

**Event Study Methodology:**

**Event Day:** M&A deal Announcement Day which is denoted by 0

**Event Window:** The event window (-5,5) i.e comprising of 5 days after and 5 days before the deal announcement date including the event announcement date.

**Estimation period for Pre M&A Systematic Risk:** To ensure that the M&A announcement has no impact on the model parameter, it is chosen as a clean period before the event window period.

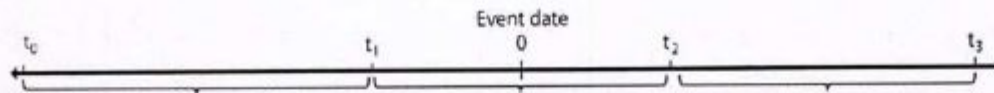
The estimation timeframe in this study is three years prior the date of the initial public announcement of the deal. The actual daily return data of Acquiror and Nifty 50 is used to calculate 3 year pre M&A beta. Systematic risk is been calculated using Ordinary Least Square regression method. One of the most widely utilised models is the "market model" It is based on a reference market's real returns as well as the stock of the company's correlation with the reference market.

$$R_i = \alpha + \beta * R_{m,t}$$

**Estimation period for Post M&A Systematic Risk:** To ensure that the M&A announcement has no impact on the model parameter, it is chosen as a clean period before the event window period.

The estimation timeframe in this study is three years post the date of the initial public announcement of the deal. The actual daily return data of Acquiror and Nifty 50 is used to calculate 3 year post M&A beta. Systematic risk is been calculated using Ordinary Least Square regression method. One of the most widely utilised models is the "market model" It is based on a reference market's real returns as well as the stock of the company's correlation with the reference market.

$$R_i = \alpha + \beta * R_{m,t}$$



<p><b>Estimation Window</b></p> <p>This is considered as Pre M&amp;A Window. Systematic risk (beta) is calculated using daily data in during Window</p>	<p><b>Event Window</b></p> <p>This is event period when M&amp;A deal has been announced.</p>	<p><b>Post - Event Window</b></p> <p>This is considered as Post M&amp;A Window. Systematic risk (beta) is calculated</p>
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- H<sub>01</sub> - There is no significant negative impact on Long Term Shareholders Systematic Risk of acquiring company due to M&A deal for Healthcare Sector in India ( $\beta_{\text{post M\&A}} \leq \beta_{\text{Pre M\&A}}$ )
- H<sub>a1</sub> - There is a significant negative impact on Long Term Shareholders Systematic Risk of acquiring company due to M&A deal for Healthcare Sector in India ( $\beta_{\text{post M\&A}} > \beta_{\text{Pre M\&A}}$ )





t-Test: Paired Two Sample for Means (Healthcare)

	<i>beta_nextthreeyear</i>	<i>beta_lastthreeyear</i>
Mean	0.93986	0.607915
Variance	0.032716095	0.054158694
Observations	56	56
Pearson Correlation	0.370409869	
Hypothesized Mean Difference	0	
Df	55	
t Stat	2.931648664	
P(T<=t) one-tail	0.0023156	
t Critical one-tail	1.786816136	
P(T<=t) two-tail	0.005742289	
t Critical two-tail	2.009660223	

**Interpretation**

Based on above paired t test analysis on 3-year systematic risk post M&A and 3-year systematic risk pre M&A for 56 deals we can reject the null hypothesis as p value (one-tail) is low as compared to Sigma (0.05) and calculated t value is the rejection area.

It can be concluded that most of the long-term systematic Risk (beta) of the Acquiring companies from Healthcare sectors has increased post M&A. The reason could be that shareholders of Acquiring Company could not see the synergies for the premium paid to Target in 3 years which lead to increase in the risk perception.

Generally, the amount paid to the shareholders of Target Company is much above the current market price. Thus, the amount that goes out of the company would increase the risk perception. Acquiring companies should consolidate the Target company very fast in order to start generating revenue or/and cost synergies so that positive signal is sent to shareholder and stakeholder so that systematic risk of the companies reduces. This is essential for reducing cost of equity as well as cost of debt which will eventually increase the overall value of firm as well as shareholders wealth.

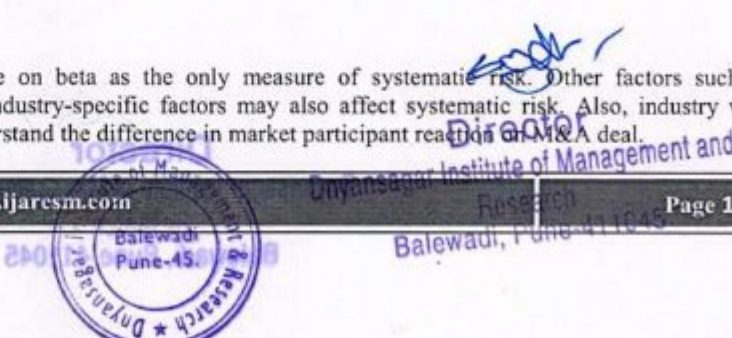
**CONCLUSION**

The empirical study shows that market participants react negatively post M&A for Acquiring companies in healthcare sector in India as systematic risk increases significantly. The finding suggests that for the M&A deal generally destroy the shareholders wealth due to the negative market perception over premium price paid to the Target company. These findings have certain implication for the shareholders, senior management like CFO and policy makers as well.

This analysis bring attention to senior management of Acquiring company to carefully assess the purchase price of Target company and inform the shareholder the synergies that would be created in long term for the premium amount proposed to be paid. Also, the management need to work on consolidation of the Target company very fast in order to start generating revenue or/and cost synergies so that positive signal is sent to shareholder and stakeholder so that systematic risk of the companies reduces. This will lead to reduction in the overall cost of equity as a result the value of the shareholders wealth will increase.

**Limitation of the Study**

The study's limitations include the reliance on beta as the only measure of systematic risk. Other factors such as idiosyncratic risk, market conditions, and industry-specific factors may also affect systematic risk. Also, industry wise shareholders wealth can be evaluated to understand the difference in market participant reactions on M&A deal.







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## A Study on the Investors' Perception Related to M&A on Shareholders' Wealth and Profitability of Banks in India

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### Keywords

Perception, Mergers, Acquisitions, Shareholders, Profitability

### JEL Classification

G11, G21, G30, G34

**Abstract:** The purpose of this research is to understand investors' perceptions related to M&A on shareholder's wealth as well as profitability with reference to Indian banks. A total of 219 investors in India's banking sector made up the study's population. The study used an online questionnaire to gather quantitative data, which was then processed using the statistical software SPSS. According to the report, mergers and acquisitions in the banking industry boost shareholder value. Investors had a different perspective of shareholders' wealth after mergers and acquisitions, according to Income and qualification. This paper will focus on different individual perception towards Shareholders wealth and profitability of Banks according to the demographic factors. This paper will benefit the Acquiring Companies to understand investors' perception of their shareholders' wealth post announcement of M&A. Accordingly the Policy makers can frame policies post studying the perception of Investors.

### 1. Introduction

Around the globe, mergers & acquisitions have a significant impact on how businesses operate. M&A provides businesses with an inorganic growth that spans national and international boundaries. According to Kumar (2009) Takeovers, mergers, acquisitions, and other forms of restructuring are frequently used to reduce competition. M&A are becoming more common across all industries. Mergers and acquisitions are motivated by a variety of factors, including the creation of value for the shareholders of acquiring companies and different stakeholders, as well as creating synergy (Kwoka and Pollitt, 2010). As a result, shareholder value has increased. However, the findings of this study reveal that not all mergers and acquisitions add value to shareholders. The target company's shareholders benefit greatly, especially if the acquirer pays a premium to compete with other acquirer as well to motivate target company shareholder for M&A (Teti and Tului, 2020). The acquirers, on the other hand, see



their stock price underperform in the months after the purchase, with no major long-term gains. Business success is not only a solitary endeavor, but a collective initiative aimed at achieving a common goal of shareholder wealth and profitability maximization.

Business organizations are increasingly using M&A as a key strategy to fully satisfy and meet client expectations in today's fast-paced commercial market (Pathak, 2016). Because of their ongoing restructuring initiatives, including mergers and acquisitions, major financial firms still exist today (Mohapatra and Jha, 2018). Businesses engage in mergers and acquisitions for a variety of reasons, including the expansion of company prospects, the reducing of risk, and the development of market power. To generate economies of scale, promote product and market diversity, and replace management teams who are ineffective, mergers and acquisitions have been used by many organizations (Pawaskar, 2001).

## 2. Review of Literature

The performance of regional rural banks (RRBs) in India was examined by Chaudhary *et al.* (2021). All the chosen profitability proxies, except for ROE after amalgamation and before amalgamation, indicate no statistically significant change. The panel data technique indicates a favorable and considerable impact of the merger on the profitability (ROE) of RRBs and demonstrates that equity return significantly increased in the post-merger period.

Badreldin and Kalhoefer (2009). studied Egyptian banks from 2002 to 2007 and concluded that there was no significant improvement in ROE as compared to pre-M&A deal. While the profitability of the banks did not improve, there was a slight improvement in credit risk.

Fiordelisi and Molyneux(2010) used samples of European banks from 1998 to 2005 for their investigation of the elements that contribute to the generation of shareholder value. Economic development, company expansion, and efficient capital allocation can all have an impact on the bank's performance. Using dynamic panel data, where different industries, macroeconomic conditions, and bank-specific features are linearly coupled, the bank's shareholder value is modelled. It indicates that increases in cost efficiency have a positive link with shareholder value, and changes in revenue efficiency have a positive association with economic gains. It has been established that bank performance is impacted by leverage, credit losses, liquidity risk, and market risk.

Hanvanich *et al.* (2005) created a joint ventures theory that considers the relationship between the job and the effects of national cultures as well as the impact of shareholder value generation on technology. To learn how the parents of the US partner affected the creation of shareholder value in a joint venture, an event-study methodology was adopted. The findings highlight the intricate relationship between knowledge type, national cultural differences, and work relevance.

De Beule and Sels (2016) have researched the significance of a developing market's ability to absorb developed market share while simultaneously generating shareholder value. It calculates the anomalous cumulative return of listed Indian companies that have made cross-border acquisitions in Europe, focusing on the level of acquirer research. The outcome demonstrates a U-shape association between the cumulative abnormal return and the level of Indian buyers' inquiry into European acquisitions. Although firms with excellent capacity in research lead the competitors of India, the firm could access advanced targets that have no capacity in research that could satisfy from the acquisition.



This is because the firm's capacity has adsorption, which exploits and explores the knowledge based on target acquired.

Teti and Tului (2020) examined the Abnormal Returns of targeted companies, which had a statistically significant positive impact, compared to the positive but non-statistically significant CAARs earned by acquire firms, using samples from a global dataset of record infrastructure companies from 1997 to 2017—80% of which were utilities. The result shows how restructuring, which profoundly defined the 20 years by altering the environment's architecture and encouraging the spread of mergers and acquisitions, had an impact.

The effect of sentiment on market return in India was studied by Rohilla and Tripathi (2022). The findings suggest that investors get higher returns during bullish sentiments and vice versa. When sentiment is negative, they lose their money, which might cause a snowball effect. Asset pricing and return models like CAPM, the three- and five-factor Fama-French models, and the four-factor Carhart model should take market sentiment into account.

Colombo and Turati (2014) focused on all merger and acquisition (M&A) activities that took place in the Italian banking industry between 1995 and 2006 that had a regional impact. It was clearly evident that regional economic and social factors have a significant direct impact on both the concentration of the banking sector in Italy and the concentration of acquiring banks in agglomerations in highly developed regions.

The performance impact of post-merger mergers and scarce determinants have been explored by Kiesel *et al.* (2017). It examines the performance based on long-term and short-term abnormal shareholder returns using 826 samples of transaction announcements that took place between 1996 and 2015. It has been discovered that the service offered affects how well acquiring companies function after a merger. While sea freight carriers have little impact and CEP firms have no impact, short-distance railway, term trucking, air cargo, and 3PL companies have atypical returns as positive. Long-term returns are abnormal for 3PL and the railroad firms, whereas losses are experienced by CEP and no returns are seen in trucking, air cargo, or sea freight. Overall, full-service providers outperform diversified transactions when focus expanding transactions of specialized operators are included.

Boubaker *et al.* (2014) claim that Going Private Transactions (GPTs) announcements have resulted in an accumulation of average anomalous returns, with the pre-transaction shareholders' averages being paid as a raw premium. The rise in shareholder value of GPTs will have an effect on the increasing potential value created by private ownership.

A technique for evaluating supply chain integration called the "industry exchange effect on calculating shareholder value" has been looked into Mitra and Singhal (2008). Along with the worth of the shareholders' influence, the importance of the stock market's reaction or unexpected returns associated to joint industry exchanges or announcements to form are analyzed. It was shown that the successful outcome shows anomalous returns from the industry engagement.

### 3. Objectives and Hypothesis of the Study

#### 3.1. Objectives of the Study

- To study investors' perception towards shareholders value post Mergers and Acquisitions of Banks based on Demographic factors.



- To study the investors' perceptions towards profitability of Banks post Mergers and Acquisitions of Banks based on Demographic factors.

### 3.2. Hypotheses of the Study

- H01: There is significant difference between investors perception towards shareholders value post Mergers and Acquisitions of Banks based on Income.
- H02: There is a significant difference between investors perception towards shareholders value post Mergers and Acquisitions of Banks based on Qualification.
- H03: There is significant difference between investors' perceptions towards profitability of Banks post Mergers and Acquisitions based on Income
- H04: There is significant difference between investors' perceptions towards profitability of Banks post Mergers and Acquisitions based on Qualification.

### 4. Research Methodology

Utilizing digitally delivered questionnaires to the respondents, statistical research design is used. The questions were presented as statements that required the respondent to assess their impression and assign a score using a Likert scale. The questionnaires are divided into two sections. The demographic information comes first, followed by the primary body of the research, or several claims. As a sampling technique, convenience sampling is employed. The sample size for the study is made up of 219 investors. Frequency, mean, and one-way ANOVA are the analytical methods employed in this study.

### 5. Data Analysis and Interpretation

Table 1: Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	71	32.4	32.4	32.4
	2	33	15.1	15.1	47.5
	3	60	27.4	27.4	74.9
	4	35	16.0	16.0	90.9
	5	20	9.1	9.1	100.0
	Total	219	100.0	100.0	

Source: Authors' Own Compilation

Table 2: Qualifications

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	41	18.7	18.7	18.7
	2	119	54.3	54.3	73.1
	3	10	4.6	4.6	77.6
	4	49	22.4	22.4	100.0
	Total	219	100.0	100.0	

Source: Authors' Own Compilation

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**Table 3: Cronbach Alpha Score**

Sr. No	Independent Variable	Questions Asked	Cronbach Alpha Score	Test Result
1	Shareholders wealth	6	0.90	Satisfied
2	Profitability	6	0.838	Satisfied

Source: Authors' Own Compilation

The Cronbach Alpha Score for both the variable is more than 0.7. Thus, we can conclude that the scale is reliable and satisfactory.

H01: There is significant difference between investors perception towards shareholders value post Mergers and Acquisitions of Banks based on Income.

F-test is applied to test the above null hypothesis using ANOVA Table 3 Results are as follows.

**Table 4: ANOVA**

<i>Shareholders Wealth</i>					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	10516.244	4	2629.061	13.941	.000
Within Groups	40357.300	214	188.586		
Total	50873.544	218			

Source: Authors' Own Compilation

### **5.1. Interpretation**

The above table shows that on the basis of different level of income, most of the Investors are having the perceptions that post Mergers and Acquisitions, Prices of shares will increase, demand for shares will increase, increase in EPS, Dividend issued will raise, Frequency of Dividend will increase, Investors Voting power will dilute.

The p-value (Sig.) calculated using Anova Table for F-test is 0.000 which is very low as compared than standard 0.05. Hence null hypothesis is rejected. The POST HOC test is applied to test difference between perceptions towards shareholders wealth in every group (Income) is significant or not.

H02: There is a significant difference between investors' perception towards shareholders' value post Mergers and Acquisitions of Banks based on Qualification.F-test is applied to test the above null hypothesis using ANOVA recorded in table 5.

  
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Table 5: POST HOC TEST (Multiple Comparisons)

Dependent Variable: Shareholders Wealth LSD						
(I) Income	(J) Income	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Upto 3lakhs	3-5lakhs	12.96018535541*	2.89324151737	.000	7.2572844294	18.6630862814
	6-8lakhs	13.59221998745*	2.40815818690	.000	8.8454722750	18.3389676999
	9-11lakhs	16.27249209633*	2.83624601857	.000	10.6819356396	21.8630485530
	12lakhs and above	1.21126760612	3.47640757138	.728	-5.6411184941	8.0636537063
3-5lakhs	Upto 3lakhs	-12.96018535541*	2.89324151737	.000	-18.6630862814	-7.2572844294
	6-8lakhs	.63203463205	2.97620637287	.832	-5.2343992546	6.4984685187
	9-11lakhs	3.31230674093	3.33209693716	.321	-3.2556270435	9.8802405254
	12lakhs and above	-11.74891774929*	3.89152773639	.003	-19.4195518800	-4.0782836186
6-8lakhs	Upto 3lakhs	-13.59221998745*	2.40815818690	.000	-18.3389676999	-8.8454722750
	3-5lakhs	-.63203463205	2.97620637287	.832	-6.4984685187	5.2343992546
	9-11lakhs	2.68027210888	2.92083025421	.360	-3.0770092869	8.4375535047
	12lakhs and above	-12.38095238133*	3.54575344580	.001	-19.3700269153	-5.3918778474
9-11lakhs	Upto 3lakhs	-16.27249209633*	2.83624601857	.000	-21.8630485530	-10.6819356396
	3-5lakhs	-3.31230674093	3.33209693716	.321	-9.8802405254	3.2556270435
	6-8lakhs	-2.68027210888	2.92083025421	.360	-8.4375535047	3.0770092869
	12lakhs and above	-15.06122449021*	3.84934190780	.000	-22.6487056593	-7.4737433212
12lakhs and above	Upto 3lakhs	-1.21126760612	3.47640757138	.728	-8.0636537063	5.6411184941
	3-5lakhs	11.74891774929*	3.89152773639	.003	4.0782836186	19.4195518800
	6-8lakhs	12.38095238133*	3.54575344580	.001	5.3918778474	19.3700269153
	9-11lakhs	15.06122449021*	3.84934190780	.000	7.4737433212	22.6487056593

\*. The mean difference is significant at the 0.05 level.

Source: Authors' Own Compilation

Table 6: ANOVA Shareholders Wealth

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3170.033	3	1056.678	4.762	.003
Within Groups	47703.511	215	221.877		
Total	50873.544	218			

Source: Authors' Own Compilation

The above table shows that on the basis of different level of Qualifications, most of the Investors are having the perceptions that post Mergers and Acquisitions, Prices of shares will increase, demand



for shares will increase, increase in EPS, Dividend issued will raise, Frequency of Dividend will increase, Investors Voting power will dilute.

The p-value (Sig.) calculated using Anova Table for F-test is 0.003 which is very low as compared than standard 0.05. Hence null hypothesis is rejected. The POST HOC test is applied to test difference between perceptions towards shareholders wealth in every group (Income) is significant or not.

**Table 7: Post Hoc Test- Multiple Comparisons (Dependent Variable: Shareholders Wealth)**

(I) Qualifications	(J) Qualifications	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Graduate	Postgraduate	-1.03651216657	2.69743212537	.701	-6.3533103636	4.2802860305
	Diploma	16.83623693405*	5.25350443103	.002	6.4812691021	27.1912047660
	Ph.D.	-2.13752399950	3.15273326834	.499	-8.3517476677	4.0766996687
Postgraduate	Graduate	1.03651216657	2.69743212537	.701	-4.2802860305	6.3533103636
	Diploma	17.87274910062*	4.90430326572	.000	8.2060774110	27.5394207902
	Ph.D.	-1.10101183293	2.52836088735	.664	-6.0845606240	3.8825369581
Diploma	Graduate	-16.83623693405*	5.25350443103	.002	-27.1912047660	-6.4812691021
	Postgraduate	-17.87274910062*	4.90430326572	.000	-27.5394207902	-8.2060774110
	Ph.D.	-18.97376093355*	5.16873074482	.000	-29.1616348180	-8.7858870491
Ph.D.	Graduate	2.13752399950	3.15273326834	.499	-4.0766996687	8.3517476677
	Postgraduate	1.10101183293	2.52836088735	.664	-3.8825369581	6.0845606240
	Diploma	18.97376093355*	5.16873074482	.000	8.7858870491	29.1616348180

Source: Authors' Own Compilation

H03: There is significant difference between investors' perceptions towards profitability of Banks post Mergers and Acquisitions based on Income

To test the above null hypothesis ANOVA is obtained and F-test is applied. Results are as follows.

**Table 8: ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12935.449	4	3233.862	21.273	.000
Within Groups	32532.224	214	152.020		
Total	45467.673	218			

Source: Authors' Own Compilation

The above table shows that on the basis of different level of Income, most of the Investors are having the perceptions that post Mergers and Acquisitions, market share will enlarge, Net and Gross profit will increase and also number of clients will increase.

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The p-value (Sig.) calculated using ANOVA Table for F-test is 0.000 which is very low as compared than standard 0.05 (5% significance level). Hence null hypothesis is rejected. POST HOC test is applied to test the difference between perceptions towards shareholders wealth in every group (Income) is significant or not.

**Table 9: Post Hoc Test-Multiple Comparisons (Dependent Variable: Profitability LSD)**

(I) Income	(J) Income	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Upto 3lakhs	3-5lakhs	13.6723371*	2.5976493	.000	8.552081	18.792593
	6-8lakhs	18.1918176*	2.1621252	.000	13.930028	22.453607
	9-11lakhs	16.4231101*	2.5464768	.000	11.403721	21.442499
	12 lakhs and above	10.9537223*	3.1212353	.001	4.801420	17.106024
3-5lakhs	Upto 3lakhs	-13.6723371*	2.5976493	.000	-18.792593	-8.552081
	6-8lakhs	4.5194805	2.6721379	.092	-.747601	9.786562
	9-11lakhs	2.7507730	2.9916684	.359	-3.146138	8.647684
	12 lakhs and above	-2.7186147	3.4939442	.437	-9.605567	4.168338
6-8lakhs	Upto 3lakhs	-18.1918176*	2.1621252	.000	-22.453607	-13.930028
	3-5lakhs	-4.5194805	2.6721379	.092	-9.786562	.747601
	9-11lakhs	-1.7687075	2.6224194	.501	-6.937788	3.400373
	12 lakhs and above	-7.2380952*	3.1834964	.024	-13.513121	-.963070
9-11lakhs	Upto 3lakhs	-16.4231101*	2.5464768	.000	-21.442499	-11.403721
	3-5lakhs	-2.7507730	2.9916684	.359	-8.647684	3.146138
	6-8lakhs	1.7687075	2.6224194	.501	-3.400373	6.937788
	12 lakhs and above	-5.4693878	3.4560683	.115	-12.281683	1.342907
12 lakhs and above	Upto 3lakhs	-10.9537223*	3.1212353	.001	-17.106024	-4.801420
	3-5lakhs	2.7186147	3.4939442	.437	-4.168338	9.605567
	6-8lakhs	7.2380952*	3.1834964	.024	.963070	13.513121
	9-11lakhs	5.4693878	3.4560683	.115	-1.342907	12.281683

Source: Authors' Own Compilation

H04: There is significant difference between investors' perceptions towards profitability of Banks post Mergers and Acquisitions based on Qualification.

To test the above null hypothesis ANOVA is obtained and F-test is applied. Results are as follows.

**Table 10: ANOVA (Profitability)**

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4075.416	3	1358.472	7.056	.000
Within Groups	41392.257	215	192.522		
Total	45467.673	218			

Source: Authors' Own Compilation





Table 8 shows that on the basis of different level of Qualifications, most of the Investors are having the perceptions that post Mergers and Acquisitions, market share will enlarge, Net and Gross profit will increase and also number of clients will increase.

The p-value (Sig.) calculated using ANOVA Table for F-test is 0.000 which is very low as compared than standard 0.05. Hence null hypothesis is rejected. The POST HOC test is applied to test difference between perceptions towards shareholders wealth in every group (Income) is significant or not

**Table 11: Post Hoc Test- Multiple Comparisons (Dependent Variable: Profitability LSD)**

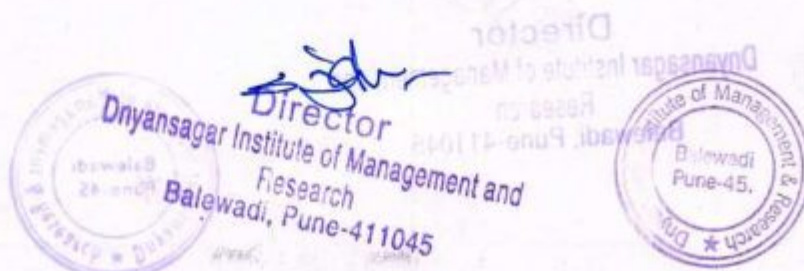
(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Graduate	Postgraduate	5.3611689*	2.5126668	.034	.408554	10.313784
	Diploma	20.9337979*	4.8936565	.000	11.288112	30.579484
	Ph.D.	8.5956055*	2.9367813	.004	2.807036	14.384175
Postgraduate	Graduate	-5.3611689*	2.5126668	.034	-10.313784	-.408554
	Diploma	15.5726291*	4.5683745	.001	6.568093	24.577165
	Ph.D.	3.2344366	2.3551764	.171	-1.407755	7.876629
Diploma	Graduate	-20.9337979*	4.8936565	.000	-30.579484	-11.288112
	Postgraduate	-15.5726291*	4.5683745	.001	-24.577165	-6.568093
	Ph.D.	-12.3381924*	4.8146895	.011	-21.828230	-2.848155
Ph.D.	Graduate	-8.5956055*	2.9367813	.004	-14.384175	-2.807036
	Postgraduate	-3.2344366	2.3551764	.171	-7.876629	1.407755
	Diploma	12.3381924*	4.8146895	.011	2.848155	21.828230

Source: Authors' Own Compilation

## 6. Results and Discussion

It has been found that on the basis of different level of income, most of the Investors have different perceptions towards shareholders wealth post Mergers and Acquisitions. It can be said that a lot of investors have mixed understanding related to impact on the share price, demand for shares, EPS, Dividend, Frequency of Dividend and Investors Voting power. It has been observed that on the basis of different levels of Qualifications, most of the Investors have different perceptions towards shareholders wealth post Mergers and Acquisitions. It can be said that a lot of investors have mixed understanding related to impact on the share price, demand for shares, EPS, Dividend, Frequency of Dividend and Investors Voting power.

It is analyzed that on the basis of different level of Income, most of the Investors have different perceptions towards profitability post Mergers and Acquisitions. It can be inferred that lot of investors have mixed understanding related to impact on market share, Gross and Net profit and solvency position. It is noted that on the basis of different level of Qualifications, most of the Investors have different perceptions towards profitability post Mergers and Acquisitions. It can be inferred that a lot of investors have mixed understanding related to impact on market share, Gross and Net profit and solvency position.





## 7. Conclusion

From the above study it has been concluded that Post Mergers and Acquisitions, Investors have a different perception towards shareholders' wealth and profitability according to Income and qualification.

There is a significant difference in Investors' perceptions according to Income and Qualifications towards shareholders wealth post Mergers and Acquisitions. Investors with different income levels and qualifications have different perceptions towards shareholders' wealth. Also, there is a significant difference in Investors' perceptions according to Income and Qualifications towards profitability post Mergers and Acquisitions. Investors with different income level and qualification has different perception towards Profitability.

Thus, it is necessary for investors to do in-depth analysis using historical data to understand the impact on the shareholders wealth as well as on the profitability of the company post M&A. The investor should also examine the underlying reason of M&A along with its long-term impact on the acquiring company.

Also, companies who are planning to go for Merger or Acquisition should thoroughly review the price paid to target company as well as analyze the synergies that will impact the shareholder wealth. It is important for acquiring a company to build confidence among shareholders by clearly disseminating the deal information. This will eventually lead to positive impact on the Shareholders wealth.

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## “HUMAN RESOURCE RECRUITMENT AND SELECTION IN IT SECTOR ”

<sup>1</sup>Dr. Swati Singh <sup>2</sup>Dr. Manisha Khaladkar

### Abstract

The success of an organization depends heavily on the people who work there. An organization cannot progress and succeed without positive and creative contributions from people. Therefore, in order to achieve the goals of the organization, it is Recruitment is a very important factor in increasing the profitability or business development as recruitment helps in choosing the suitable candidates for the available vacancies.

The main purpose of doing this research is to understand the process of recruitment and selection that takes place in an organization. This survey was conducted to analyze recruiting and selected positions within the organization. Meanwhile, selection is the process of pre-screening, reviewing, prioritizing, and shortlisting applicants to identify the most suitable candidate for the job. The aim is to filter and on board candidates with the right behavioral traits, attitude, and domain knowledge to fulfil the task efficiently. The two processes go together in hiring the most relevant candidates.

Attracting a large number of applicants ensures that the company has a vast candidate pool to choose the desired candidates. Talent acquisition specialists can then employ various methods to hire a suitable candidate. Recruitment is the process of attracting quality candidates to fill existing job openings. The process may include advertising job openings through social media, professional associations, and career- related websites. Through recruitment, hiring managers reach out to the potential and passive job applicants and encourage them to apply for available openings.

**Keywords:** Recruitment, selection job enhancement

### Introduction:

Recruitment is an ongoing process, and certain vacancies are not resolved, and the company seeks to develop qualified candidates to meet the needs of future human resources. Typically, the recruitment process begins when an administrator starts recruiting staff for a specific vacancy or expected vacancy. Candidate recruitment is a preceding function, which helps to create a pool of prospective employees for the organization and allows managers to select the right candidates for the right jobs in this pool. The main goal of the recruitment process is to facilitate the selection process. Recruitment is almost central to all management processes, and failure to adopt leads to organizational difficulties, including the impact on profitability and inadequate levels of people and skills. Incorrect recruitment can cause labor shortages or problems in management decisions.

### Need for recruitment

It is possible to select the right person in the right place at the right time. You can also get the people and types you need to ensure your organization's ongoing operations. Vacancies: promotion, transfer, retirement, permanent disability, death and turnover. Creation of new rooms: for the growth and diversification of business activities of enterprises. A new vacancy may also occur by appointment. Factors Effecting Recruitment:

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All organization whether small or large they engaged in recruitment activities, though not with same extent. This differs with

- Size of organization.
- Working conditions, salaries and benefit packages provided by the organization.
- The employment condition of the community in which the organization is located.
- The rate of growth of the organization
- The organization's ability to find and retain talented individuals of outstanding achievement.

### Literature Review:

Aakash Gopalia (2004) - This research paper, studies the recruiting case of Tesco to assess how effective the E-recruitment is. This study used to theory-build approach. E-recruitment cuts the costs compared to traditional recruitment and its effectiveness can be used by other organizations throughout different industries.

Ms. D Shahila & Ms. R. Vijayalakshmi (2013)- This research paper, studies the usage of trends, challenges, methods and practice in e-recruitment. Organizations use E-recruitment for job postings and hiring. Many of the applicants find the process easier as the companies provide value added services.

Sree Lakshmi.J & Dr.A.Ravi (2013)- The main theme of the study is to select the right person for the right job through E-Recruiting the recruiters filter the candidate and select the candidate and the persons were selected in E-recruiting is call for an interview. Based on the interview process followed in the particular organization they may select the candidate for their organization. E-recruiting is hiring potential candidates with various processes like Screening of resume, online tests, etc.

Dr. Ankita Jain, Ankita Goyal (2014)- This paper determines what all E-Recruitment strategies are used by the organizations in India after being globalized. This study was conducted in few of the reputed banks in Jaipur, India. It studies on the processes of re-recruitment along with its methods. It further studies about the challenges and advantages

### Objectives:

- To provide necessary information about the procedures of Recruitment and Selection techniques used in IT sector.
- To collect information and insight about the Recruitment & Selection function of the organization.
- To assess the effectiveness of the process practiced by IT companies.

### Research Methodology:

Data using personal interviewing techniques are collected through self-designed surveys. The main data collection for his purpose should be done by judging sampling conversation. Data was collected from Web sites, going through records of the organization, Books, Journals etc. The study was conducted in a systematic procedure starting from selection of the topic to final report preparation. The important part was to identify and collect data. They were classified, analyzed, interpreted, and presented in a systematic way to find important points. The overall

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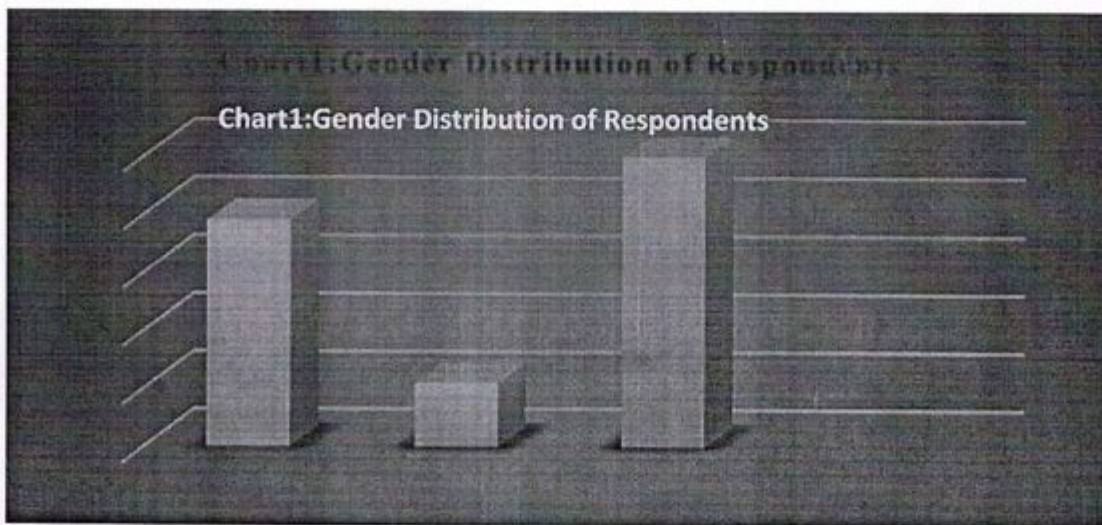
process of the methodology followed in the study is explained further. In this research work, the data has retrieved from 50 employees sample sizes. Data collected from sources is analyzed and interpreted systematically with the help of statistical tools such as percentages.

### Result & Discussions:

### Result & Discussions:

**TABLE: GENDER WISE**

Response	No. of Responses	Percentage
Male	39	78%
Female	11	22%
Total	50	100%



### Analysis & Interpretation:

From the above table it is evident that 78% of the respondents were males and 22% of the respondents were females.

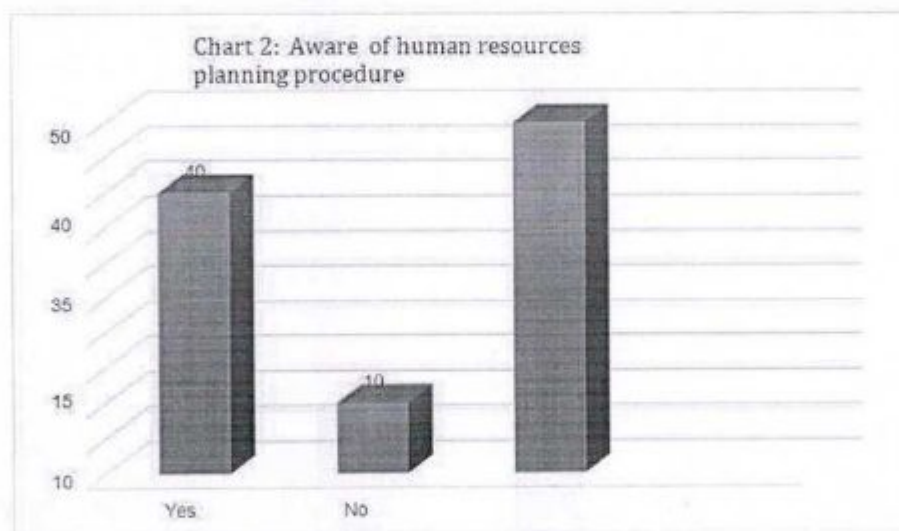
**TABLE 2: AWARE OF HUMAN RESOURCES PLANNINGPROCEDURE**

Response	No. of Responses	Percentage
Yes	40	80%
No	10	20%
Total	50	100%



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**Analysis & Interpretation:**

From the above table it is evident that 80% respondent are aware of human resources planning procedure and 20% respondent are not aware of human resources planning procedure .

**TABLE 3: RECRUITMENT AND SELECTION ARE DONE SYSTEMATICALLY**

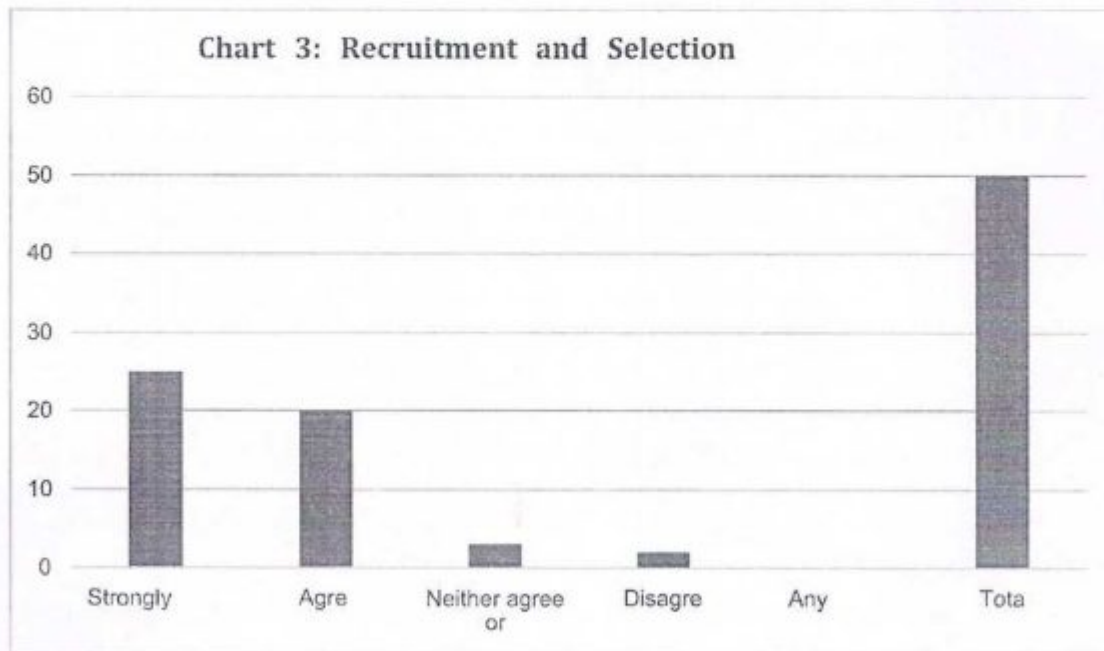
Response	No. of Responses	Percentage
Strongly Agree	25	50%
Agree	20	40%
Neither Agree nor Disagree	03	6%
Disagree	02	4%
Total	50	100%



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**Analysis & Interpretation:**

The above chart shows that 50% of respondent strongly agree that recruitment and selection are done systematically and 6% are neutral towards the recruitment and selection which is are done systematically.

**TABLE 4: MODE OF SELECTION**

Response	No. of Responses	Percentage
Written Test	20	40%
Interview	22	44%
Both	06	12%
Merit Only	02	04%
Any other	00	00%
Total	50	100%

**FINDINGS**

- The study depicts that 80% respondent are aware of human resources planning procedure and 20% respondent are not aware of human resources planning procedure.
- The study depicts that 50% of respondent strongly agree that recruitment and selection are done systematically and 6% are neutral towards the recruitment and selection which is are done systematically. The study depicts 44% of the respondent says mode of selection is through Interview, 40% respondent says that mode of selection is through written test, and 4% respondent says that onmerit selection.
- The study depicts that 40% of the respondents says that four stages involved in selecting candidate and 30% of the respondents says there are 2 stages are involved in selecting the candidate.



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- In the survey, 50% of the respondents said that the effectiveness of the interview process and other selection measures such as testing is adequate, and 42% of respondents said the equipment is excellent, including the evaluation of the effectiveness of the interview process and other choices.
- The study depicts that 52% of the respondents says that internal recruitment vacancies are declared publicly, 20% of the respondents agree to the internal recruitment vacancies are declared publicly and 10% of the respondents are disagree to the internal recruitment vacancies are declared publicly.
- The study depicts that 84% of the respondents says yes that they are satisfied with the program of induction and orientation in your company and 16% of the respondents says no that they are not satisfied with the programmer of induction and orientation in your company.
- The study depicts that 46% of the respondents says that main motive behind choosing the job at is at career growth, 20% of the respondents says that main motive behind choosing the job Saver is through skill enhancement, 18% of the respondents says that main motive behind choosing the job at is for knowledge gaining.
- According to the survey 42% of respondents provide HR qualified good applicants responded that they provided the right candidate
- The study depicts that more of the respondents agree that are satisfied with the training procedure given in the Organization, and 6% of the respondents who are satisfied with the training phase given to the organization do not object to not being satisfied with the training level given to the organization.
- The study depicts that 48% of the respondents agree to succession planning is in advance in , 30% of the respondents strongly agree to succession planning is in advance and 12% if the respondents neither
- Agree nor disagree to succession planning is in advance and 6% of the respondents disagree to succession planning is in advance.
- According to the survey, 36% of the respondents who answered that job description and job specification HR are clearly defined in the recruitment process, and job description and job specifications in the recruitment process clearly define the HR. We clearly define job content.

### Conclusion

This helps to understand the various aspects of the organization and how the organization works and how to identify and solve problems. The organization's recruitment sources are based on factors, both internal and external. The recruitment of candidates for a particular post depends on the age, experience, qualifications, and percentage of the academic year.

The selection process is entirely based on communication skills and technical qualities. Human resources are becoming an integral part of an organization. Work, functions, tasks, and tasks may be performed by a skilled person skilled in the art. When the number of members of the organization is aware of the more appropriate recruitment and selection process that can make a choice of human resources in the right way.

The employed individual may have experience and knowledge, but how to change with in the organization about various aspects such as working conditions, attitudes and behavioral characteristics of job-performing employers, how to increase productivity, the use of



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innovative technologies, and so on. When an employee is selected, it must be dedicated to a loyal organization. They must attempt to perform their duties and have the qualities of wit, diligence, and conscience. Finally, it may be said that organizations are required to practice recruitment and selection processes with accuracy, accuracy, and truth.

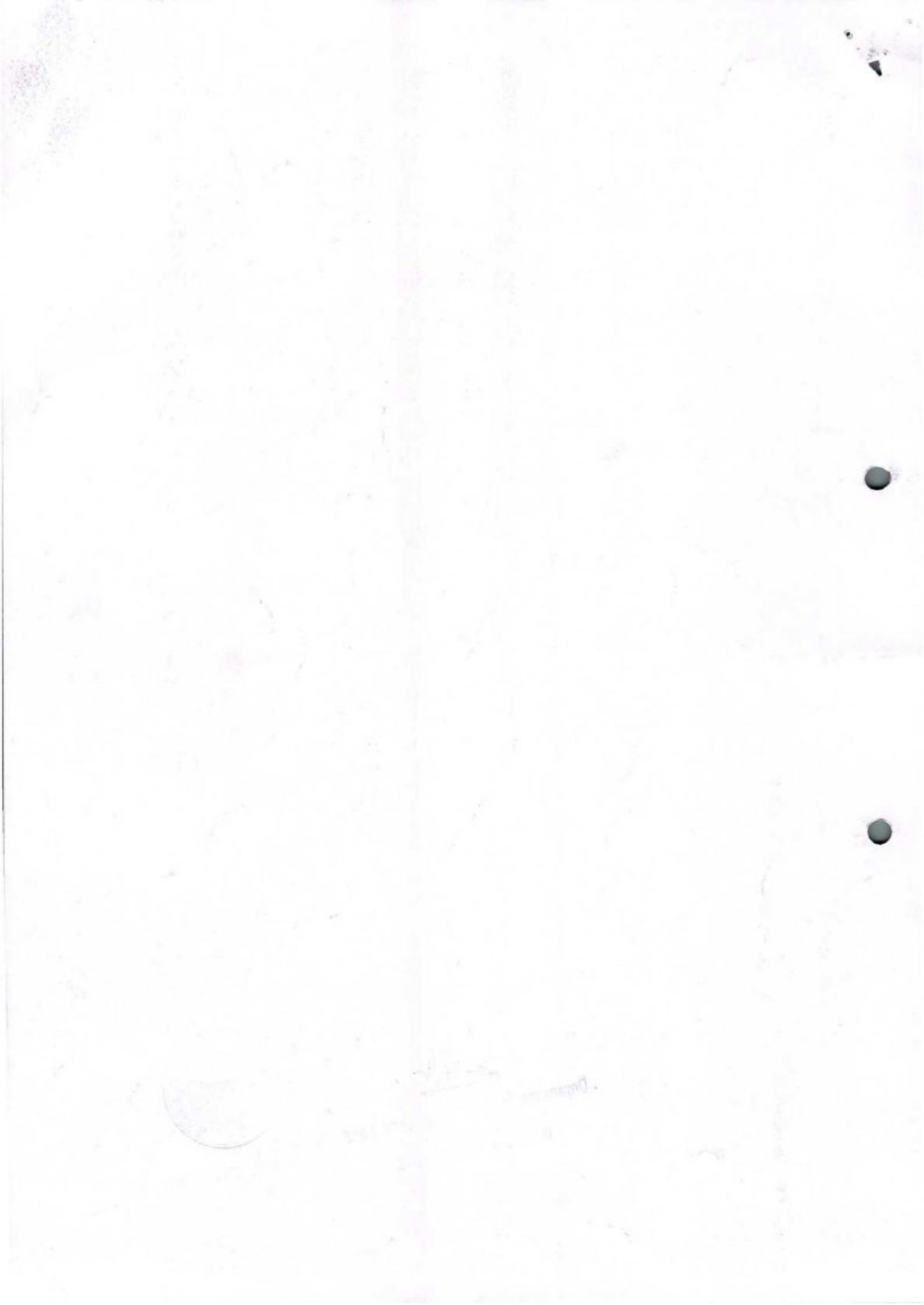
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Peer Reviewed

# Journal of Fundamental & Comparative Research

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## शोधसंहिता

New Research Frontiers

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Dr. Manisha Jagtap

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## A STUDY OF CONSUMER PURCHASE PATTERN IN TWO-WHEELER AUTOMOBILE INDUSTRY

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### Abstract

With a market share of 76.9% (FY 22) the Indian two-wheeler industry holds a prominent position in the automobile sector. A study on customer purchase pattern in the two-wheeler market usually focuses on customer identification and customer purchasing pattern. This study is conducted to understand the customer purchase pattern with reference to, type of two wheeler purchased, time of purchase, purpose of purchase, average daily usage and repeat purchase. The researcher uses a descriptive research design to carry out the study. The data has been collected through a structured questionnaire using convenience non-probability sampling technique from 755 customers who own a two wheeler two wheeler customers in Pune city. Data is analysed using Excel and various statistical tools.

The study's findings have significant implications for marketers who need to understand consumer purchase patterns and identify trends in consumer behaviour to address marketing challenges effectively.

**Keywords:** Automobile industry, Indian two wheeler industry, Two-wheeler customer, Consumer behaviour, consumer purchase pattern.

### INTRODUCTION

The Indian automobile industry has gained significant recognition in recent times, ranks seventh globally, and comprises of passenger vehicles, two-wheelers, three-wheelers and commercial vehicles. The two-wheeler segment is a significant contributor to the Indian economy and it holds a leading position in the Indian automobile market with a 76.9% (FY 22) <sup>1</sup>market share. It includes motorcycles, scooters, mopeds, and electric two-wheelers. It is projected to reach a market size of USD 26,638.49 million in 2028, growing at a CAGR of 9.88%<sup>2</sup>.

This segment has experienced notable growth over the last two decades, while domestic two-wheeler companies have dominated various customer segments, they face stiff competition from foreign competitors, resulting in a highly competitive market. To succeed in this market, two-wheeler companies require a comprehensive understanding of customer behaviour, which enables them to identify customer profiles and purchasing patterns. Thus, understanding the consumer purchase pattern in this industry becomes crucial for the players in the market. Hence, successful businesses innovate in response to changing customer needs by identifying target markets.

### NEED OF THE STUDY

Understanding consumer purchasing habits is critical for companies in this industry. Consumer behaviour is classified based on the five questions posed by any purchase: what, when, why, how, and where. Two-wheeler purchasing patterns have evolved over time, and they now depend on customer preferences and new product launches. Marketers must research consumer purchasing habits and identify buying trends.

<sup>1</sup> ibef (n.d.). Retrieved from ibef website <https://www.ibef.org/industry/india-automobiles/infographic>

<sup>2</sup> techsciresearch (n.d.). Retrieved from techsciresearch website <https://www.techsciresearch.com/report/indian-two-wheeler-market/13028.html>

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The research motive behind the study to be conducted is to identify the two wheeler customers and closely understand their purchase pattern.

### LITERATURE REVIEW

(M. Sathish & A. Pughazhend, 2011)<sup>3</sup> conducted a study in Tirunelveli city, Tamil Nadu with 125 sample size on the consumers buying motives and their behaviour towards two-wheelers. The study found that the customers' purchase decisions were mainly influenced by their need, purchasing power and the price of the two-wheeler. It also revealed that customers with limited purchasing power preferred expensive bikes due to their advanced features and aesthetic value. The study recommended that two-wheeler companies provide customers with new versions and unique designs to meet their expectations. (Dr. V. Joseph Paul Raj, 2013) aimed to identify the factors that influence buyer behavior towards the two-wheeler. The study used a simple random sampling method to select 156 respondents from the Madurai district in Tamilnadu, stratified into moped, bike, and scooter users. The study used factor analysis, discriminate analysis, and chi-square analysis to analyze the data and realize the stated objectives. The findings of the study can help companies in the two-wheeler market to understand the preferences of buyers and make informed decisions regarding branding, marketing, and sales.

### OBJECTIVES OF THE STUDY

1. To study the demographic profile of the customers purchasing two wheelers
2. To understand the purchase pattern of two wheeler customers.

### METHODOLOGY

The study has used a convenience sampling technique to collect primary data from a sample of 755 respondents. To collect primary data, the study has adopted a structured questionnaire that included 13 closed-ended questions. The study has tabulated and analyzed the responses to draw meaningful conclusions. Secondary data was collected from various sources, including newspapers, magazines, periodicals, journals, two wheeler company annual reports and websites.

### SCOPE OF THE STUDY

The scope of the study is clearly defined as focusing on the purchase patterns of selected two-wheeler customers in Pune city. The study is limited to seven major two-wheeler companies and two segments of the two-wheeler industry, namely motorcycles and scooterettes. The study specifically targets first-hand two-wheeler users in Pune city as the respondents.

### RESULT AND DISCUSSION:

#### 1. DEMOGRAPHIC PROFILE OF THE RESPONDENTS

The study has considered demographic factors that influence customer purchase decisions. In this study, a set of personal characteristics of the 755 respondents have been examined and presented, including age, income, gender, qualification, occupation and annual family income.

<sup>3</sup> M. Sathish, & A. Pughazhend. (2011). A study on consumer behaviour of automobile products with special reference to two-wheeler in Tirunelveli City Tamil Nadu. Indian Journal of Applied Research, 1 (3), 161-163.





**1.1 Age and Gender wise composition of respondents**

Of the total sample of 755 respondents, 632 (83.7%) were males and remaining 123 (16.3%) were females. Table no. 1.1 shows the distribution of the respondents according to their age and gender.

**Table 1.1: Age and Gender wise composition of respondents**

Gender	Age Group					Total
	18-21	21-25	25-35	35-50	50 and above	
Male	85 (11.3%)	251 (33.2%)	206 (27.3%)	74 (9.8%)	16 (2.1%)	632 (83.7%)
Female	21 (2.8%)	54 (7.2%)	36 (4.8%)	9 (1.2%)	3 (.4%)	123 (16.3%)
<b>Total</b>	106 (14.0%)	305 (40.4%)	242 (32.1%)	83 (11.0%)	19 (2.5%)	755 100.0%

Based on the data provided, it can be inferred that the majority of respondents were males, with 33.2% of males belonging to the age group of 21-25 years and 27.3% belonging to the age group of 25-35 years. Only a small percentage of females (7.2% for the age group of 21-25 years and 4.8% for the age group of 25-35 years) were included in the sample.

It is interesting to note that only 19 respondents (16 males and 3 females) were above the age of 50 years, while 11% of respondents belonged to the age group of 35-50 years, with 74 (9.8%) males and 9 (1.2%) females.

Overall, these findings suggest that the majority of two-wheeler customers in Pune city are young males in the age group of 21-35 years. Companies may want to focus their marketing efforts on this demographic, while also considering the needs and preferences of other segments, such as older customers and female customers.

**1.2 Marital status & Occupation of the respondents**

The following table shows the marital status and occupation of the respondents

**Table 1.2: Marital status & Occupation of the respondents**

	Frequency	Percent		Frequency	Percent
Married	486	64.4	Student	241	31.9
Single	269	35.6	Professional/ Business	195	25.8
			Salaried	298	39.5
			Housewife	17	2.3
			Retired	4	.5
<b>Total</b>	755	100.0	<b>Total</b>	755	100.0





Based on the data provided, it can be inferred that the majority of two-wheeler respondents in Pune city are married, with 486 (64%) of the 755 respondents being married. This finding is consistent with the average age of the respondents being in the late adolescent age group, where many individuals may be getting married.

Additionally, the data shows that the highest group using two-wheelers in Pune city is the salaried class, with 39.5% of the respondents being salaried. This suggests that two-wheeler companies may want to focus their marketing efforts on this group, as they represent a significant portion of the market.

Overall, the demographic information provided can be useful for companies looking to target specific segments of the two-wheeler market in Pune city. By understanding the characteristics of their target audience, companies can tailor their products, services, and marketing efforts to meet the unique needs and preferences of their customers.

### 1.3 Qualification and Annual Family Income of the respondents

The following table depicts the educational qualification and annual household income of the respondents.

**Table 1.3: Qualification and Annual Family Income**

Qualification	Annual Family Income (Rs.)					Total
	Less than 1,50,000	1,50,000 to 2,50,000	2,50,000 to 5,00,000	5,00,000 to 10,00,000	10,00,000 and above	
High School	2	4	2	0	7	15
SSC	1	20	9	4	9	43
HSC	5	33	25	17	15	95
Graduation	11	83	144	96	53	387
Post-graduation	4	35	73	62	41	215
Total	23	175	253	179	125	755

Majority of the two-wheeler respondents in Pune city are well-educated and have a relatively high annual household income. Specifically, the study found that 144 (19.1%) respondents were graduates with annual earnings between Rs. 2.5 – 5 lacs as annual household income. In contrast, there were only 11 (1.1%) respondents who had low educational qualification as well as low income (HSC and below HSC with less than Rs. 1.5 Lacs annual income). This indicates that the majority of the respondents are not only well-educated but also have a relatively high annual household income.

Overall, the data suggests that the demographic profile of two-wheeler customers in Pune city skews towards those with higher education and income levels. This finding may have implications for the marketing and promotion strategies of two-wheeler companies in the region, as they may need to tailor their messaging and offerings to appeal to this demographic.

## 2. PURCHASE PATTERN

Consumer purchasing patterns can change over time due to various factors such as changes in personal circumstances, societal influences, and marketing strategies employed by companies. It's important for companies to understand and analyse consumer purchasing patterns in order to tailor their marketing





efforts to meet the needs and wants of their target customers. Consumer buying behaviour patterns can be grouped in relation to:

1. Purpose of Purchase
2. Vehicle Purchased
3. Time of Purchase
4. Average daily travel
5. Repeat Purchase

A proper study of 755 two-wheeler users (respondents) and their purchase pattern is represented here are as below:

### 2.1 Purpose for purchasing a two wheeler

The purpose of purchasing a two wheeler is very important consideration for every customer. The purpose may be commuting to office, buying groceries and daily needs, dropping children to school etc. Having an intention is the basic motivation behind purchasing, customer gets some kind of creative impulses to purchase the right two wheeler. The researcher tried to investigate the purpose behind purchasing a two wheeler and to do so multiple choice question were designed to record the responses from the customers.

**Table 1.4: Purpose for purchasing a two wheeler**

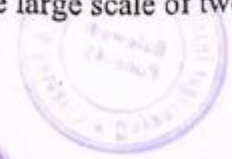
	Responses	
	N	Percent
Commuting to office/college	544	53.1%
Buying groceries and daily needs	223	21.8%
Dropping children to school	86	8.4%
Others	172	16.8%

From the above table, it is inferred that the 53.1% of the respondents are using their vehicle daily to commute to office or college, 21.8% of the respondents are using their vehicle very often to buy groceries and daily need, 8.4% of the respondents are using to drop children to school and 16.8% of the respondents are using their vehicle for other reasons. The researcher could found out through interviewing the respondents the other reasons were like passion and enjoyment, status, long ride, participate in rally, recreation/shopping trips, business purpose etc. It is important for companies to understand the various motivations and needs of their customers in order to provide them with the right product and services.

### 2.2. Reason for preferring a two wheeler

Possessing a two wheeler can be a solace on Pune's over crowded streets and highways. As customer differs in their preference hence there may be different reasons to purchase a two wheeler. Majorly two wheeler is preferred as it is economic compared with other transport facilities available, convenient, it helps to manoeuvre the heavy traffic, better choice to public transport, can find parking easily in busy streets and travel short distances without spending too much money. In the last decade large scale of two wheeler utilization signifies a fast development in Indian two wheeler markets.

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**Table 1.5: Reason for preferring a two wheeler**

	Frequency	Percent
Economic	176	23.3
Convenient	377	49.9
Lack of public transport	131	17.4
Others	71	9.4
Total	755	100.0

From the above table it can be inferred, 49.9% of respondents consider that convenience is the major reason while purchasing the two wheeler, 23.3% of the respondents prefer a two wheeler for an economic reason, 17.4% of the respondents prefer a two wheeler due to lack of public transport and 9.4% of the respondents prefer a two wheeler for other reason. The researcher could discovered through meeting the respondents alternate reasons were like manoeuvrability, ease of parking, shorter distances, to avoid traffic jam, lower tax rates compared to four wheeled vehicles, more comfortable, saves time as faster mode of transport as compared to other and the unavailability of proper cycling and pedestrian facilities in many places. One such astounding response given by the respondent for mentioning the other reason for preferring a two wheeler was no toll tax for two wheeler.

### 2.3 Average daily travel

**Table 1.6: Average daily travel**

	Frequency	Percent
0-5 (km)	25	3.3
5-20 (km)	263	34.8
20-40 (km)	292	38.7
40-60 (km)	137	18.1
60 and above (km)	38	5.0
Total	755	100.0

From the above table it is observed that 38.70% of the respondents are travelling around 20-40 (km) in a day, 34.80% of the respondents are travelling around 5-20 (km) per day and 5% of the respondents are covering around 60 (km) and above every day.

### 2.4 Type of two-wheeler currently owned

The Indian two wheeler industry is witnessing a persistent growth and the two wheeler companies have recognized the market's needs and are delivering the different models of motorcycles and scooterettes to different target segments. The two wheeler industry is dominated by these two segments. Data related to type of two wheeler possessed by 755 respondents is presented in the table

**Table 1.7: Type of two-wheeler currently owned**

	Frequency	Percent
Scooterette	222	29.4







Motorcycle	533	70.6
Total	755	100.0

Based on the observation of the above table, 70.6% of respondents own a motorcycle while 29.4% own a Scooterette.

### 2.5. Time of purchase

Customers are at the beneficiary end and are having a wide range of products to select from. The festive season is considered as an auspicious time to purchase two wheelers in India. This gives an adequate source to the two wheeler companies and that is why maximum range of launches is seen throughout this festive time of the year.

**Table 1.8: Time of purchase**

	Frequency	Percent
Festive Period	317	42.0
Regular Period (Non-Festive)	438	58.0
Total	755	100.0

From the above table it is inferred that 58% of the respondents have purchased vehicle in regular (non-festive) period and 42% of the respondents have made their purchases during festival seasons. It can be inferred that festive time gives a sequential growth in volumes of two wheelers.

### 2.6 Duration of usage

**Table 1.9: Duration of usage**

	Frequency	Percent
<1 years	339	44.9
1-2 years	156	20.7
2-4 years	232	30.7
4-6 years	28	3.7
6-8 years	0	0
8-10 years	0	0
>10 years	0	0
Total	755	100.0

From the above table, it is inferred that 44.9% of the respondents are using the vehicle not more than one year, 20.70% of the respondents are using the vehicle for the past 1-2 years, 30.7% of the respondents are using the vehicle for the past 2-4 years and 3.7% of the respondents are using the vehicle for the past 4-6 years.

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**4.2.7 Two wheeler brand currently used**

The two-wheeler market is a popular segment in the Indian market. Every company is planning or is already with their offering. As of now, India is one of the great destinations for a two wheeler enthusiast, who want to be spoiled through preference. The two wheeler companies are constantly impelling a couple of new models in the country. Customers now, are more brands conscious.

**Table 1.10: Two wheeler brand currently used**

	Frequency	Percent
Bajaj	161	21.3
Hero Motors	172	22.8
TVS	87	11.5
Yamaha	68	9.0
Honda	224	29.7
Suzuki	29	3.8
Mahindra & Mahindra	14	1.9
Total	755	100.0

From the above table, it is inferred that the 29.7% of the respondents are using Honda brand, 22.8% of the respondents are using Hero Motors brand, 21.3% of the respondents are using Bajaj brand, 11.5% of the respondents are using TVS, 9% of the respondents are using Yamaha, 3.8% of respondents are using Suzuki and 1.9% of the respondents are using Mahindra & Mahindra two wheelers. This implies that the two wheeler market is dominated by Honda, Hero Motors and Bajaj.

**2.8 Repeat purchase**

The ownership of two wheeler brands and repeat purchase by the respondents was studied by the researcher.

**Table 1.11: Ownership of two wheeler brands and repeat purchase by the respondents**

Two wheeler brand being used currently	Purchased same Brand		Total
	Yes	No	
Bajaj	62	99	161
Hero Motors	53	119	172
TVS	27	60	87
Yamaha	35	33	68
Honda	84	140	224
Suzuki	10	19	29
Mahindra & Mahindra	5	9	14
Total	276 (36.6%)	479 (63.4%)	755 (100.0%)



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From the above table, it is inferred that 36.6 % of the respondents have made the purchases of the same brand of two wheeler. Brand loyalty can be measured through repeat purchase of the brand. The table depicts the Yamaha respondents are 68 and out of which 35(50%) are repeat buyers hence Yamaha customers are very much brand loyal whereas the market leaders Honda, Hero and Bajaj need to pay more attention to customers than competition then only repeat purchases can be garnered. Due to the customer database available and a relationship that has been made due to earlier purchase, it requires sincere effort to be in contact with the current existing customers. Since the customers are continuously and positively engaged with the two wheeler brand the customers have a tendency to react more effectively to marketing activities and make repurchase decisions.

### 2.9 Ownership of another two wheeler

**Table 1.12: Ownership of another two wheeler**

	Frequency	Percent
Yes	342	45.3
No	413	54.7
Total	755	100.0

From the above table it is inferred that 45.3 % of respondents did possess another two-wheeler whereas 54.7 % did not possess another two wheeler. It can be stated that due to convenience factor another two wheeler is preferred by the respondents

### 2.9.1 Ownership of another two wheeler brand

**Table 1.13: Ownership of another two wheeler brand**

	Frequency	Percent
Bajaj	46	13.5
Hero Motors	72	21.0
TVS	56	16.4
Yamaha	25	7.3
Honda	106	31.0
Suzuki	28	8.2
Mahindra & Mahindra	9	2.6
Total	342	100.0

From the above table it is inferred that 45.3% of respondents did possess another two wheeler and Honda has a major share of 31%, followed by Hero Motors with 21%, TVS by 16.4% and Bajaj by 13.5%. Another two wheeler in the house may be for a female member or a senior citizen to commute for daily needs.

### CONCLUSION:

The study has explored various demographic factors like age, income, gender, education and occupation which influence the purchase decision of customers. It has also examined the purpose of purchase, type

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of vehicle purchased, time of purchase, average daily travel, and repeat purchase behaviour patterns of customers.

The insights gained from the study can help the players in the two-wheeler industry to make informed decisions about product design, pricing, distribution channels, and promotional activities. For example, the study has revealed that the majority of respondents are salaried and use their vehicle for daily commutes. This information can be used by the industry players to design products that cater to the needs of this segment, such as fuel-efficient vehicles with features like easy manoeuvrability and comfortable seating.

Overall, the study can serve as a valuable resource for the Indian two-wheeler automobile industry, enabling players to better understand the needs and preferences of customers, and develop strategies to cater to them.

### LIMITATIONS

1. The study was restricted to only seven two wheeler companies functioning in Pune city.
2. The study is limited to only first-hand two-wheeler users in Pune city.

### SCOPE FOR FURTHER RESEARCH

The research theme contains potent for further research in following areas:-

1. The customers buying decisions in semi-urban and rural areas.
2. Study of the motives behind changing the brand while purchasing another vehicle by the customers.
3. Study the factors which induce the customers to do the vehicle servicing from the service centres other than the authorized one.

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## ANALYZING CUSTOMER RESPONSES TO FACTORS SHAPING PURCHASE DECISIONS IN THE TWO-WHEELER MARKET: THE ROLE OF INFORMATION SOURCES AND PROMOTIONAL TOOLS

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### ABSTRACT

*This study investigates the complex decision-making process of Indian consumers when selecting a two-wheeler brand in an increasingly crowded and competitive market. Two-wheelers have become the favoured mode of transportation due to traffic congestion and cost-effectiveness. However, consumers face a bewildering array of choices, prompting them to employ systematic evaluation methods.*

*This study unveils the motivations propelling consumers to select one two-wheeler brand over another. It meticulously examines the sources of information and influence that carry significant weight in consumers' decision-making processes. Moreover, it probes the realm of promotional tools, including celebrity endorsements, finance schemes, and enticing offers, to elucidate their role in stimulating purchase decisions.*

*In Pune, as in any other city, a purchase decision seldom unfolds in isolation. It is often the outcome of discussions with immediate family, relatives, friends, colleagues, and even the local mechanics whose expertise is sought in understanding these vehicles. These discussions form the crucible in which consumer preferences are forged, rendering the study of these interactions all the more pertinent.*

*As we venture deeper into Pune's bustling consumer landscape, our aim is to unravel the factors and influences that steer choices within this thriving metropolis. This research not only aims to provide insights valuable to manufacturers, marketers, and policymakers within the two-wheeler industry but also contributes to the broader understanding of consumer behaviour in the context of urban transportation preferences in India. Within Pune's narrative, we find echoes of the larger tale of choice, influence, and mobility in the modern world.*

### INTRODUCTION

In a nation that cherishes the freedom of movement, the two-wheeler has emerged as the quintessential companion for commuters seeking a seamless, cost-effective, and agile means of travel. The appeal of these vehicles extends far beyond their utilitarian aspects; it encapsulates the essence of convenience, style, and efficiency. Yet, this burgeoning market is a paradox in itself. While it offers consumers the liberty to explore a multitude of brands and models, it also presents them with a labyrinthine puzzle of choices. From the sleek city scooters designed for nimble urban navigation to the robust motorcycles built for long-haul adventures, each brand and model seeks to carve its niche in the hearts and lives of Indian consumers.

As we delve into this enthralling world of consumer preferences, Pune emerges as our focal point. This thriving city, much like the rest of India, has embraced two-wheelers with open arms. Pune's denizens, in their quest for pragmatic mobility solutions, find themselves at crossroads where a multitude of options converge. It's within this dynamic urban landscape that consumers wrestle with a complex interplay of factors and influences, ultimately shaping their brand preferences.

### Why Pune?

Pune's distinctive character lies in its blend of tradition and modernity. This city, known for its rich history, is also a burgeoning IT and industrial hub. As urbanization continues its march, the city's roadways have witnessed an influx of two-wheelers, mirroring a broader national trend. To unravel the intricate dynamics of brand selection, we focus on Pune – a microcosm of the larger Indian urban landscape.

### Navigating the Maze: Sources and Influences

In a world inundated with information, consumers embark on their two-wheeler journey with a diverse set of guiding stars. Friends, family, online reviews, television advertisements, the expert counsel of local mechanics – each plays a role in shaping the final decision. It is in these interactions and discussions that preferences are honed and choices are crystallized. This research endeavors to illuminate the pathways through which these sources and influences guide consumers' decisions.

### Beyond the Product: The Role of Promotion

In a realm where marketing and promotion hold sway, the role of celebrity endorsements, finance schemes, and alluring offers cannot be underestimated. These promotional tools have the power to sway decisions, often



transcending the product's intrinsic qualities. By delving into this dimension, we seek to understand how marketing strategies impact consumer choices.

### **The Broader Implications**

The insights drawn from this study extend beyond the boundaries of Pune. They offer valuable perspectives to manufacturers, marketers, and policymakers in the two-wheeler industry. Moreover, they contribute to a deeper understanding of consumer behavior in the context of urban transportation preferences across India.

### **NEED OF THE STUDY**

This study is indispensable in unravelling the intricate dynamics of consumer behaviour within Pune's two-wheeler market, which has burgeoned due to traffic congestion and the need for cost-effective urban mobility. With consumers facing an overwhelming array of choices, understanding the pivotal factors and influences guiding their purchase decisions is imperative. This research not only empowers consumers by providing insights for informed choices but also aids businesses in tailoring their strategies, thus enhancing market competitiveness. Policymakers can use these findings to craft consumer-centric regulations, while academia benefits from a nuanced understanding of urban transportation preferences. Moreover, the study holds economic significance, as it can bolster economic growth and job creation in Pune and the wider region.

### **LITERATURE REVIEW**

(Nath, 2006) conducted a study on 294 motorbike users in upper Assam to understand the impact of advertising and promotions on their buying behaviour and brand preferences. The research found that age significantly influenced brand choice, with younger individuals favouring premium brands and older individuals opting for economy brands. Interestingly, income levels did not correlate with motorcycle choice. The study highlighted the importance of advertising and promotions in influencing rural and urban consumers, with Hero-Honda emerging as the most preferred brand due to factors like comfort, fuel economy, and price. It emphasized the diverse nature of motorbike consumers and the need for tailored marketing efforts.

(Prof. Pradeep Biradar & Prof. K.M.Prashan, 2014) explored the role of advertising in the purchasing decisions of two-wheeler customers, both men and women. Their study focused on advertising strategies to attract consumers and create brand awareness. The research revealed that factors like better mileage, price, and engine power significantly influenced consumer choices. Effective advertising media support was seen as crucial for making consumers aware of product availability. The study underscored the challenge for marketers to make product information more appealing and distinct and suggested that Integrated Marketing Communication programs play a key role in target analysis, brand positioning, and product promotion.

(J. Martin Leonard, 2015) focuses on the showcasing and marketing strategies within the two-wheeler industry, emphasizing the crucial role of dealer networks and showrooms. It involves a sample of 40 showroom staff and 150 customers from four prominent showrooms in Tiruchirapalli. The research examines customer preferences, perceptions of dealer services, and satisfaction levels, as well as showcasing techniques, promotional activities, and company responsibilities in two-wheeler sales. The study's recommendations underscore the importance of enhancing customer services to attract a broader customer base.

(Chauhan, 2015) explores how various types of social media affect sales promotion and influence individuals and organizations in their buying decisions. The study concluded that social media indeed plays a substantial role in enhancing both sales and sales promotion within the automobile sector.

(Kamra, 2015) assessed the extent of social media's influence on Indian automotive consumers. Through comprehensive primary research, the results revealed a robust impact of social media across various parameters in the buying process. These parameters included vehicular research, recommendations, vehicle technologies, finance calculators, and Facebook page marketing. All of these aspects significantly influenced consumers before making their automobile purchases.

### **OBJECTIVES OF THE STUDY**

1. To examine the sources of information that influence consumers while making two-wheeler purchase decisions.
2. To assess the impact of promotional tools on consumers' buying choices.
3. To gain insights into how discussions with family members, relatives, friends, colleagues, and local mechanics shape consumers' preferences and purchase decisions.



**METHODOLOGY OF THE STUDY**

Data for this study was collected from both primary and secondary sources. Primary data was obtained from 755 two-wheeler customers in Pune through a structured questionnaire. These respondents provided insights into their demographic profiles and sources of information that influence consumers while making two-wheeler purchase decisions. The data was collected within two-wheeler dealer outlets in Pune, systematically tabulated, and analyzed. Additionally, the inclusion of secondary data from various reputable sources, such as books, journals, and reports, further enriches the study's context. The study follows a descriptive research design, employs Convenience Non-Probability Sampling, and focuses on Pune city as the study area.

**SCOPE OF THE STUDY**

The scope of this study encompasses a comprehensive exploration of the factors influencing two-wheeler purchase decisions among consumers in Pune, India, within the period of 2010 to 2015. It delves into demographic variations, sources of information, and the impact of promotional tools, while also considering the interpersonal influences that shape consumer choices. The study aims to provide valuable insights for manufacturers, marketers, policymakers, and consumers, offering a nuanced understanding of the complex decision-making process in the Pune two-wheeler market.

**RESULT & DISCUSSION**

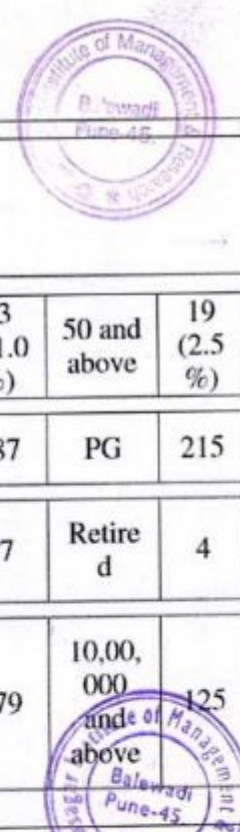
**1. DEMOGRAPHIC PROFILE OF THE RESPONDENTS**

The demographic profile of the 755 respondents in this study, representing two-wheeler customers in Pune, encompasses a diverse range of age groups, income levels, genders, educational qualifications, and occupations.

**Table 1. Demographic Profile of Respondents**

Gender	Male	632 (83.7%)	Female	123 (16.3%)							
Marital Status	Single	486 (64.4%)	Married	269 (35.6%)							
Age (in yrs)	18 -21	106 (14.0%)	21-25	305 (40.4%)	25-35	242 (32.1%)	35-50	83 (11.0%)	50 and above	19 (2.5%)	
Qualification	High School	15	SSC	43	HSC	95	Graduation	387	PG	215	
Occupation	Student	241	Professional/ Business	195	Salaried	298	House wife	17	Retired	4	
Annual Family Income (Rs.)	Less than 1,50,000	23	1,50,000 to 2,50,000	175	2,50,000 to 5,00,000	253	5,00,000 and 10,00,000	179	10,00,000 above	125	

The respondents in this study were drawn from Pune city, and they exhibited variations in key demographic aspects, including income group, educational qualifications, and occupation. Out of the total sample size of 755 respondents, a significant majority, comprising 632 individuals (83.7%), were males, while the remaining 123 (16.3%) were females. The age distribution among the male respondents indicated that 33.2% fell within the 21-25 years bracket, and 27.3% belonged to the 25-35 years category. Among female respondents, 7.2% were in the 21-25 years age group, and 4.8% were in the 25-35 years age group. Furthermore, a smaller subset of 19 respondents (16 males and 3 females) were aged above 50 years, and 11% fell within the 35-50 years age range, comprising 74 males (9.8%) and 9 females (1.2%). The marital status of the respondents revealed that 486 individuals (64%) were married, primarily owing to the prevalence of late adolescents in the respondent pool. In terms of occupation, the data showed that 39.5% of respondents were salaried, 31.9% were students, 25.80%





were professionals or businessmen, 2.3% were housewives, and the remaining 0.5% were retired. Notably, the highest usage of two-wheelers was observed among the salaried class. Regarding educational qualifications and income, 144 respondents (19.1%) were graduates with annual household incomes ranging from Rs. 2.5 to 5 lakhs. Conversely, there were only 11 respondents (1.1%) with lower educational qualifications and incomes (HSC and below HSC with less than Rs. 1.5 lakhs annual income). This data underscores that a majority of two-wheeler respondents in Pune are well-educated, highly qualified, and possess an annual average household income exceeding Rs. 1.5 lakhs.

## 2. FACTORS INFLUENCING THE CUSTOMERS PURCHASE DECISION

In Pune, a city where two-wheelers have emerged as the go-to mode of transportation owing to escalating traffic congestion and inadequate road infrastructure, owning a two-wheeler is a choice grounded in convenience, ease of use, cost-effectiveness, mobility, and hassle-free parking. However, the Indian two-wheeler market presents consumers with an abundance of choices, spanning various segments and brands, leaving them in a state of bewilderment. The relentless and inventive advertising and promotional campaigns by two-wheeler companies add to the complexity of the purchasing decision. In this technologically driven age, consumers meticulously evaluate brands before making their choices, a process that's crucial in an industry characterized by a multitude of competitors. This study, set against the backdrop of Pune city, seeks to unravel the factors guiding the purchase decisions of respondents, shedding light on what prompts them to select one two-wheeler brand over others in this bustling urban environment.

### 2.1 SOURCE OF INFORMATION

The most important ingredient in the buying process is information. No buyer can actually buy a product without having sufficient and adequate information. Acquisition of information is the first step in the buying process. In a normal buying process, acquisition of information is a multifarious task which is completed by using various formal and informal sources. What sources of information buyers use for collection of information and how they process this information is studied by the researcher. The questionnaire has incorporated a scale, where in the respondents were requested to rank the identified sources (TV, Friends/Relatives, Displays, etc) that registered the brand while making buying decision. The respondents were requested to rank these parameters on a seven point scale, where 1 meant least influential and 7 meant most influential. The data collected is shown in table below:

Table 2: Influence of various Sources of Information

Responses	Friends / Relatives	TV	Local Mechanic	Displays	Internet/ Social Media	Hoardings/ Banners	Newspaper/ Magazine
Least Influential	6.1	6.1	21.1	9.0	22.9	13.2	20.5
2	5.4	8.2	13.6	15.9	11.7	23.4	20.8
3	6.6	9.1	14.6	14.7	18.4	18.4	16.6
4	10.3	12.5	12.7	20.4	12.7	16.8	15.4
5	10.5	17.5	16.3	15.0	15.6	15.5	10.9
6	15.8	24.5	14.2	13.4	10.6	9.9	11.9
Most Influential	45.3	22.1	7.5	11.7	8.1	2.6	4.0
Total	100%	100%	100%	100%	100%	100%	100%

From the above it is observed that influence of friends/relatives is ranked highly 61.1% to register the brand in customers mind followed by Television (46.6%). Whereas local mechanics, hoardings/ banners, newspaper/ magazine and paper insertions are not so influential to register the brand in customers mind. Product display shows a neutral influencing balance on registering the brand.

### 2.2 PROMOTIONAL ELEMENT

Basic requirement and desire of a two wheeler company is to communicate information about a product to potential customers and influence customers to buy. To convey a message about the product information, such as features, benefits, quality, usage and price a variety of promotional elements are used. The informational cognizance depends on the response of the target customers that the two wheeler is attempting to reach with its message. The researcher has incorporated a scale, where in the respondents were requested to rank the identified



promotional tools (Advertisements, Celebrity Endorsement, Finance schemes, etc.) that triggered the buying decision. The respondents were appealed to rank these parameters on a six point scale, where 1 meant least influential and 6 meant most influential. Table 4.18 shows their responses in this regard.

**Table 3: Ranking of different promotional elements**

Responses	Celebrity Endorsement	Advertisement	Finance Schemes	Attractive Discount Offers	Promotional Campaign	Contest / Sweepstake
Least Influential	16.8	3.0	9.1	7.5	8.9	54.0
2	17.5	10.2	12.2	10.2	28.9	20.7
3	17.4	9.9	16.4	18.1	25.8	11.8
4	15.8	12.1	20.4	23.2	20.0	9.8
5	17.6	22.0	23.7	23.2	11.1	3.0
Most Influential	15.0	42.8	18.1	17.7	5.3	.7
<b>Total</b>	100%	100%	100%	100%	100%	100%

Form the above table it is inferred that 62.8% of the respondents have ranked advertisement as influential promotional element that persuade the customer to buy followed by finance schemes 41.8% as second influential factor and attractive discount offers 40.9% as third influential factor. Form the above table the respondents are neutral with impulse to buy the brand due to the influence of celebrity endorsement. Form the above table 74.7% of the respondents are not influenced to buy due to contest or sweepstake.

**2.2.1 Effectiveness of promotional tools**

In all eight promotional tools given with the scale of 1-5, where 1- Not at all effective, 2- Less Effective, 3- Neutral, 4- Effective and 5- Very effective to customers and dealers and responses were analysed.

**Table 4: Ranking of Effective Promotional Tools**

Promotional Tools	Mean Rank	
	Customers view	Dealers view
TV	4.87	4.64
Internet/Social Media	3.49	3.36
Hoardings / Banners	3.37	4.41
Newspaper / Magazine	3.25	5.72
Finance Schemes	3.92	4.88
Attractive Discount Offers	3.97	5.16
Promotional Campaign	3.11	4.55
Contest / Sweepstake	1.88	3.28



It is observed from the table that television, attractive discount offers and finance schemes are most effective promotional tools as per customer's responses whereas newspaper / magazine, attractive discount offers and finance schemes are top three effective promotional tools as per dealer's responses.

**2.3 MAJOR INFLUENCE ON PURCHASE DECISION**

An individual tends to discuss with his immediate family members, relatives, friends, colleagues and may be his local mechanics before purchasing a particular product or service. All these members might support an individual's decision to buy a particular product, stop him from purchasing it or suggest few other options. They influence the purchase decision of a customer.

**Table 5: Major influence on purchase decision regarding the brand/model**

	Frequency	Percent
Self	275	36.4
Family Members	257	34.0

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Friends / Relatives	189	25.0
Colleagues	20	2.6
Local Mechanic	14	1.9
Total	755	100.0

From the above table, it is inferred that the 36.4% of the respondent's decision is self- made, 34.0% of the respondents choose the brand by the influence of family members wish and 25.0% of the respondents choose this brand by the influence of their friends. Colleagues and local mechanics have very negligible influence on purchase decisions regarding the brand.

**2.5 BUYING PREFERENCE GIVEN TO A VEHICLE WHICH IS USED BY FRIEND/ RELATIVES/ COLLEAGUES**

**Table 6: Preference given to a vehicle which is used by Friend/ relatives/ colleagues**

	Frequency	Percent
Yes	534	70.7
No	221	29.3
Total	755	100.0

From the above table, it is inferred that 70.7% of the respondents give preference in buying a vehicle used by their friends/relatives/ colleagues and 29.3% respondents do not prefer to buy a vehicle used by any of their friends/relatives/ colleagues. Customers change as per their associations with the different individual i.e. the extended family individuals like the relatives, friends and colleagues providing them with information and support. The customers offer inclination to the perspectives of these individuals to lessen the risk and uncertainty they associate with the purchasing task.

**FINDINGS**

- Sources of Information:** Friends and relatives are the most influential sources of information for customers in Pune, with 61.1% ranking them as highly influential, followed by television at 46.6%. Local mechanics, hoardings/banners, newspapers/magazines, and paper insertions have a lower impact on brand registration.
- Promotional Elements:** Advertisements are ranked as the most influential promotional element, with 62.8% of respondents considering them persuasive. Finance schemes and attractive discount offers also play significant roles in the buying decision, with 41.8% and 40.9% of respondents finding them influential, respectively. Celebrity endorsements have a neutral influence.
- Major Influence on Purchase Decision:** Self is the major influencer for 36.4% of respondents, while 34.0% are influenced by family members, and 25.0% are influenced by friends/relatives when making purchase decisions. Colleagues and local mechanics have minimal influence.
- Buying Preference Based on Associations:** A significant portion of respondents, 70.7%, prefer to buy a vehicle used by their friends, relatives, or colleagues, indicating the impact of social networks on purchase decisions.

**SCOPE FOR FUTURE STUDY:**

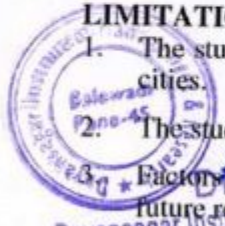
Future research can explore the dynamics of information sources and promotional tools in other cities and regions in India to identify regional variations in consumer behavior. Additionally, studying the effectiveness of specific advertising and promotional campaigns on two-wheeler purchase decisions could provide valuable insights for marketing strategies.

**LIMITATIONS OF THE STUDY:**

- The study is limited to Pune city, and findings may not fully represent consumer behavior in other Indian cities.
- The study relies on self-reported data, which may be subject to response bias.
- Factors such as cultural influences and brand loyalty were not deeply explored and could be considered in future research.

**SUGGESTIONS**

In light of the findings, it is recommended that businesses operating in Pune's two-wheeler market adapt their marketing strategies to harness the significant influence of information sources, including both traditional channels like television advertisements and digital platforms such as social media. Recognizing the generational





shift towards online information-seeking among younger buyers, companies should bolster their online presence and engagement. Moreover, the study highlights the persuasive power of well-crafted advertisements, finance schemes, and discount offers, underscoring the importance of aligning promotional tools with consumer preferences. Building on the paramount role of social networks, businesses should actively encourage positive word-of-mouth and personal recommendations, which remain pivotal in purchase decisions. Given the diversity of Pune's two-wheeler consumers, tailoring marketing approaches to specific demographic segments can enhance brand appeal. While this study offers valuable insights into Pune's market, future research could delve deeper into regional variations and the effectiveness of targeted marketing campaigns, providing businesses with an edge in the ever-evolving and competitive Indian two-wheeler industry.

## CONCLUSION

In the dynamic landscape of the two-wheeler market in Pune, this study delves into the multifaceted factors that steer consumer purchase decisions. It becomes evident that information sources wield substantial influence, with friends and relatives emerging as formidable opinion-shapers, and television advertisements casting a significant sway over consumer choices. However, the digital age has brought forth a generational shift, with younger buyers turning to the internet and social media for information, underlining the evolving nature of consumer preferences.

Promotional elements also play a pivotal role, with advertisements reigning supreme as the most persuasive tool. Finance schemes and attractive discount offers are influential in wooing customers, whereas celebrity endorsements appear to tread a more neutral ground. This nuanced understanding of promotional tools can aid businesses in crafting strategies that align with the preferences of their target audience.

It is intriguing to note the paramount role of social networks in purchase decisions. Friends, family, and colleagues contribute substantially to the decision-making process, underscoring the significance of personal recommendations and word-of-mouth in shaping consumer choices.

Moreover, the study's insights into the demographic profile of respondents reveal that Pune's two-wheeler consumers are a diverse group, spanning various age groups, marital statuses, occupations, and income brackets. This diversity presents an opportunity for businesses to tailor their marketing approaches to cater to the specific needs and preferences of different segments.

While this study provides valuable insights into the factors influencing two-wheeler purchase decisions in Pune, it is crucial to acknowledge its limitations. The findings are specific to Pune and may not be fully representative of consumer behavior in other Indian cities. Additionally, the reliance on self-reported data introduces the possibility of response bias.

As the Indian two-wheeler market continues to evolve, future research can explore regional variations in consumer behavior and the effectiveness of targeted marketing campaigns. Understanding the ever-changing dynamics of this industry will be essential for businesses aiming to thrive in the competitive and vibrant two-wheeler market.

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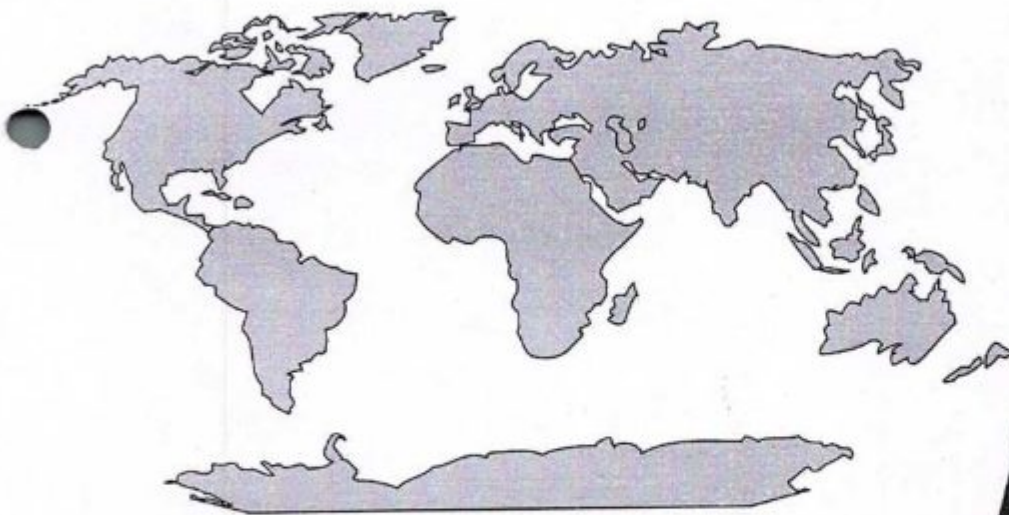
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## DECIPHERING CUSTOMER PURCHASE PRIORITIES: INSIGHTS FROM TWO-WHEELER DEALER MANAGERS IN PUNE

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### ABSTRACT

*This research explores the nuanced perspectives of two-wheeler dealer managers in Pune, regarding the prioritization of various factors influencing customers' purchasing decisions. It delves into the perceptions of these key industry stakeholders, shedding light on their insights into what drives customers to buy two wheelers. The study encompasses a diverse range of two-wheeler categories, including 100cc motorcycles, 125cc motorcycles, 150cc motorcycles, larger motorcycles (150cc and above), and scooterettes.*

*To ascertain the dealer managers' viewpoints, a structured survey was conducted, employing a scale of 1 to 8, where 1 signifies "not at all important," and 8 denotes "extremely important." The critical factors under consideration encompassed Mileage, Price, Style and Aesthetics, Pick-up, Cost of Maintenance, Comfort, Colour, and Safety. By soliciting responses from 74 dealer managers from leading manufacturers such as Hero Moto Corp, Bajaj Auto Ltd., Honda Motorcycle and Scooters India Pvt. Ltd., Yamaha Motors India, TVS Motors Company Limited, Mahindra Two Wheelers Limited, and Suzuki Motorcycle India Pvt. Ltd., this research offers valuable insights into how these managers perceive the hierarchy of factors influencing their customers' purchase decisions.*

*The findings of this study illuminate intriguing patterns in customer preferences across different two-wheeler categories, contributing to a more profound understanding of the evolving dynamics within the Pune two-wheeler market. This research provides valuable insights for both manufacturers and marketers, allowing them to tailor their strategies to better align with customer preferences and industry trends.*

### INTRODUCTION

The Indian two-wheeler market stands as a testament to the country's love affair with motorcycles and scooters. It is not merely a mode of transportation but a symbol of freedom, convenience, and style. The market's significance transcends its utilitarian aspect; it mirrors the evolving aspirations and preferences of a diverse populace. With rapid technological advancements, shifting customer preferences, and evolving government regulations, this market presents both opportunities and challenges for manufacturers and marketers. In this vibrant landscape, understanding the factors influencing customers' purchasing decisions is essential, and the perspectives of two-wheeler dealer managers are central to this understanding. To thrive in this competitive landscape, it is essential to gain profound insights into customer preferences and the factors influencing their purchasing decisions across various segments of the two-wheeler market.

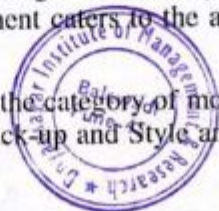
The Indian two-wheeler market is a kaleidoscope of possibilities. It encompasses a wide spectrum of segments, each catering to a unique set of needs and desires. From the nimble and efficient 100cc motorcycles that zip through city traffic to the powerful 150cc and above motorcycles designed for enthusiasts, and the stylish and versatile scooterettes tailored for urban mobility, the market has something for everyone.

In the 100cc segment, efficiency and affordability are paramount. Customers in this category often prioritize factors like Mileage and Price, seeking cost-effective and fuel-efficient options for their daily commutes. These vehicles are the lifeblood of India's congested urban streets, providing a practical solution to millions of commuters.

Moving up the ladder, the 125cc segment introduces a dash of style and performance. Here, customers begin to weigh factors like Style and Aesthetics and Pick-up, seeking a balance between utility and aesthetics. These motorcycles are popular among urban and semi-urban riders who crave a bit of flair in their daily rides.

The 150cc segment ushers in a new era of performance and sophistication. Customers in this category often prioritize Style and Aesthetics and Pick-up, looking for motorcycles that not only serve as practical transportation but also make a statement. This segment caters to the aspirational desires of riders who seek a blend of power and style.

For those who crave even more power and features, the category of motorcycles with 150cc and above engines is a playground of possibilities. Here, factors like Pick-up and Style and Aesthetics take center stage, as riders



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yearn for high-performance machines that turn heads on the road. These motorcycles are often seen as status symbols and are favoured by enthusiasts and long-distance travellers.

In contrast, the scooterette segment redefines urban mobility. Designed with a focus on Comfort and Style and Aesthetics, scooterettes are often the preferred choice for city dwellers seeking a convenient and chic way to navigate through traffic. Safety features also gain importance in this category, especially as more female riders and older individuals opt for scooterettes.

In this intricate tapestry of segments, the roles of two-wheeler dealer managers are pivotal. They are not just salespeople but guides, helping customers navigate through the maze of options to find the perfect fit for their needs and aspirations. Their insights into how different factors are ranked in each segment shed light on the evolving preferences of customers and the strategies that manufacturers and marketers can adopt to meet these preferences. This exploration into the minds of two-wheeler dealer managers is not merely an academic exercise; it is a quest for actionable insights. Manufacturers and marketers in the two-wheeler industry can leverage these insights to fine-tune their strategies, aligning them more closely with customer preferences. As the Pune two-wheeler market continues to evolve, understanding the factors that guide customer choices is not just an advantage but a necessity.

### NEED OF THE STUDY

The Indian two-wheeler market is a dynamic and multifaceted industry that serves a diverse customer base with varying preferences. This study is essential to address several critical aspects of the market. Firstly, it provides insights into the distinct preferences of different customer segments, from urban commuters to adventure enthusiasts, enabling manufacturers to tailor their products effectively. Secondly, in the face of technological advancements and evolving government regulations, understanding customer attitudes toward innovations such as electric vehicles and safety standards is crucial for market relevance. Additionally, this research sheds light on the competitive landscape, aiding manufacturers in building brand loyalty and making informed decisions regarding resource allocation. Furthermore, as the market expands into new regions and demographics, insights into regional variations in customer priorities are vital for strategic expansion. Lastly, in an era of customer-centricity and changing policies, this study equips manufacturers with the knowledge needed to navigate the complex terrain of India's two-wheeler industry, ensuring compliance, customer satisfaction, and sustainable growth.

### LITERATURE REVIEW

(Saillaja V, 2013), meticulously researched that the Indian Two-Wheeler Industry stands as the global leader with unmatched production and sales volumes. With a significant 9.5 percent growth rate recorded from 2006 to 2014, India has firmly established itself as the world's foremost two-wheeler market. Notably, the 2014-15 fiscal year witnessed an exceptional year-on-year volume growth of 14.8 percent, underscoring the industry's robust performance. The 'Make in India' campaign promises to further boost this momentum by attracting increased foreign investment, offering substantial growth prospects for the industry.

(Amechi & Long, 2013) examined the queries verged with respect to advertising clutters, medium, message, method, timing and their effect on attaining marketing and sales objectives. Extensive literature review facilitated to establish the cause and effect relationship between point of purchase (POP) advertising and consumer purchase behaviour. The suggestions would encourage corporate organisations to enhance their point of purchase (POP) advertising and marketing strategies towards escalating the overall sales.

(Baxendale Shane, 2015) delves into the influence of various touchpoints or points of interaction between consumers and a brand on the consumers' consideration of that brand. It also explore how different marketing channels and interactions affect brand perception and purchase intent.

(Gomathy, 2015) focuses on the distribution sector, highlighting its significance as a bridge between manufacturers and consumers. It acknowledges the positive effects of rapid economic growth, including access to a skilled workforce, industrial modernization, and increased availability of retail space. The study specifically examines how changing consumer preferences for quality and safety in products and services impact the retail sector. Additionally, it explores retailer perceptions regarding consumer buying behavior, preferences, and purchase decisions related to soy products like soya lumps, soya nuts, soya granules, soya chips, and soya flour.

(Mohd. Talha Khan & R. S. Jadhav, 2015) made use of SERVQUAL model to measure and identify the gap between the service quality offered by the selected two wheeler automobile industries (Hero, Bajaj and Honda). The data was collected through questionnaire from users of Hero, Bajaj and Honda residing in Lucknow, Moradabad and Noida. The study states that Bajaj with overall perceived service quality level 2.972 provides the best after sales service followed by Hero with 2.869 and Honda with 2.822. The research recognized the gap



between expectation and perception in case of customers of Hero and Honda. No such gap was found in Bajaj service industry.

#### OBJECTIVES OF THE STUDY:

1. To assess how managers rank crucial factors influencing customer decisions for different two-wheeler segments.
2. To explore how perceptions of these factors vary across distinct two-wheeler categories according to managerial insights.
3. To gain insights into the factors that managers believe are most significant for customers when purchasing two-wheelers within each category.

#### RESEARCH METHODOLOGY:

This study employs a quantitative research approach to analyze the perception of two-wheeler dealer managers regarding the ranking of factors influencing customer purchasing decisions in various two-wheeler categories. The research design encompasses the following key components:

1. **Data Collection:** Data is collected through structured interviews conducted with 74 two-wheeler dealer managers in Pune city. These managers represent dealerships associated with prominent two-wheeler manufacturers, including Hero Moto Corp, Bajaj Auto Ltd., Honda Motorcycle and Scooters India Pvt. Ltd., Yamaha Motors India, TVS Motors Company Limited, Mahindra Two Wheelers Limited, and Suzuki Motorcycle India Pvt. Ltd.
2. **Research Instrument:** A structured questionnaire is utilized as the primary research instrument. The questionnaire is designed to assess the perceived importance of various factors, such as Mileage, Price, Style and Aesthetics, Pick-up, Cost of maintenance, Comfort, Colour, and Safety, on a scale of 1 to 8, where 1 indicates "not at all important," and 8 signifies "extremely important."
3. **Sampling:** The study employs a census sampling technique, encompassing all 85 identified two-wheeler dealer managers in Pune city. However, data is successfully collected from 74 respondents due to the reluctance of 11 managers to share business information.
4. **Data Analysis:** Collected data is subjected to comprehensive statistical analysis, including descriptive statistics, mean ranking, and percentage distribution, to derive meaningful insights into the ranking of factors across different two-wheeler categories.
5. **Segmentation:** The data is segmented according to the categories of two-wheelers, which include 100cc motorcycles, 125cc motorcycles, 150cc motorcycles, motorcycles 150cc and above, and scooterettes. This segmentation allows for a focused analysis of manager perceptions within each category.
6. **Statistical Software:** Statistical software, such as SPSS, is utilized for data analysis, enabling the generation of tables, graphs, and inferential statistics to draw conclusions.

The research methodology employed in this study ensures a systematic and rigorous investigation into the perception of two-wheeler dealer managers, shedding light on the factors deemed crucial in the sale of two-wheelers across diverse categories.

#### SCOPE OF THE STUDY:

This study has a specific focus on understanding the perceptions of Two-Wheeler Dealer Managers in Pune regarding how they rank the factors that influence customer purchase decisions. The research encompasses various categories of two-wheelers, including 100cc motorcycles, 125cc motorcycles, 150cc motorcycles, motorcycles of 150cc and above, and scooterettes.

#### RESULT & ANALYSIS

##### 1. PROFILE OF DEALERS

In the pursuit of understanding the dynamics of the two-wheeler market in Pune city, the researcher engaged with a total of 85 two-wheeler dealers. Out of this comprehensive sample, valuable insights were successfully gathered from 74 two-wheeler dealers in Pune city.

The distribution of these dealers across various two-wheeler companies is outlined in table below:

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Table 1: No of Dealers of Two Wheeler Company

	Frequency	Percent
Bajaj	11	14.9
Hero MotoCorp	12	16.2
TVS	14	18.9
Yamaha	8	10.8
Honda	15	20.2
Suzuki	6	8.2
Mahindra & Mahindra	8	10.8
Total	74	100.0

From the above data, it becomes evident that the research has successfully encompassed a diverse range of two-wheeler companies. Honda emerges as the leading company represented among the dealers, commanding a significant share of 20.2%. TVS and Hero MotoCorp closely follow with 18.9% and 16.2% respectively. Bajaj secures 14.9%, while Mahindra & Mahindra and Yamaha each account for 10.8%. Suzuki, though represented by a smaller number, contributes to the research with 8.2%.

This diverse profile of dealers ensures a comprehensive and holistic understanding of the two-wheeler market in Pune city, providing valuable insights into the preferences and perceptions of dealers associated with prominent two-wheeler manufacturers.

## 2. PERCEPTION OF TWO WHEELER DEALER MANAGERS ABOUT RANKING OF DIFFERENT FACTORS WHILE SELLING

(on a scale of 1-8, where 1- not at all important and 8- extremely important)

In the vibrant landscape of the two-wheeler industry, understanding the intricacies of customer preferences and the factors that drive their purchase decisions is of paramount importance. A multitude of factors influence a customer's choice when considering the acquisition of a two-wheeler, and these factors play a pivotal role in shaping the strategies employed by dealerships.

The primary determinants that sway a customer's decision-making process encompass a spectrum of attributes, including Mileage, Price, Style and Aesthetics, Pick-up, Cost of maintenance, Comfort, Colour, and Safety. These facets collectively form the cornerstone of a customer's evaluation criteria when embarking on the journey to select their ideal two-wheeler companion.

To delve deeper into the realm of consumer choices and the strategies adopted by dealerships, this study focuses on gauging the perceptions of two-wheeler dealer managers. These professionals, stationed at the forefront of the industry, possess a unique vantage point. They are tasked with not only comprehending the intricate interplay of these factors but also with ranking them in order of importance when facilitating the sale of specific two-wheeler categories.

Utilizing a finely calibrated scale ranging from 1 (indicating "not at all important") to 8 (representing "extremely important"), this research endeavors to unravel the nuanced variations in dealer managers' perspectives. Importantly, these perspectives are dissected concerning different categories of two-wheelers, recognizing that what holds true for one category may not necessarily align with another.

In essence, this study serves as a compass, guiding us through the intricate web of factors that steer customer choices and dealer strategies in the dynamic landscape of the two-wheeler industry. The findings promise to shed light on the varying importance attributed to these factors by dealers across distinct two-wheeler categories, ultimately enriching our understanding of this dynamic market.

**The dealers are of the different opinion for different category of vehicle.**

### 2.1 Category A: Motorcycle 100cc - Dealers' Ranking of Important Factors

In the realm of 100cc motorcycles, where cost-effectiveness often takes center stage, dealers' perspectives on the importance of various factors come to the fore. The table below provides a comprehensive overview of how dealers rank these factors on a scale from 1 (not at all important) to 8 (extremely important):



Table 2: Perception of Managers about ranking the important factors for Category A: Motorcycle 100cc

Factors	Ranking							
	1 not at all important.	2	3	4	5	6	7	8 extremely important
Mileage	0	0	0	0	0	2.7	32.4	64.9
Price	0	0	0	0	1.4	4.1	60.8	33.8
Style and Aesthetics	4.1	5.4	5.4	23.0	50.0	12.2	0	0
Pick-up	2.7	6.8	29.7	39.2	12.2	8.1	1.4	0
Cost of maintenance	6.8	1.4	12.2	6.8	4.1	62.2	5.4	1.4
Comfort	5.4	31.1	20.3	25.7	17.6	0	0	0
Colour	12.2	31.1	27.0	5.4	13.5	10.8	0	0
Safety	68.9	24.3	5.4	0	1.4	0	0	0

Analyzing the data, it becomes evident that, for Category 'A' motorcycles, which typically cater to cost-conscious customers, dealers accord the highest importance to mileage (97.3%) and price (94.6%). These two factors overwhelmingly dominate the decision-making process. Notably, cost of maintenance also finds its place among the top considerations for customers in this category.

This ranking reflects the pragmatic preferences of customers in this segment, emphasizing frugality and affordability as key drivers in their purchasing decisions.

## 2.2 Category B: Motorcycle 125cc - Dealers' Ranking of Important Factors

In the domain of 125cc motorcycles, where versatility and affordability often reign supreme, dealers' insights shed light on the factors that hold the most sway in the minds of customers. The table below showcases how dealers rank these factors on a scale from 1 (not at all important) to 8 (extremely important):

Table 3: Perception of Managers about ranking the important factors for Category B: Motorcycle 125cc

Factors	Ranking							
	1 not at all important.	2	3	4	5	6	7	8 extremely important
Mileage	0	1.4	1.4	6.8	0	33.8	31.1	25.7
Price	0	0	0	1.4	4.1	32.4	44.6	17.6
Style and Aesthetics	1.4	0	0	14.9	0	27.0	12.2	44.6
Pick-up	0	1.4	6.8	12.2	20.3	5.4	16.2	37.8
Cost of maintenance	20.3	1.4	20.3	28.4	27.0	1.4	1.4	0
Comfort	10.8	37.8	21.6	25.7	1.4	1.4	1.4	0
Colour	6.8	33.8	41.9	4.1	13.5	0	0	0
Safety	60.8	24.3	8.1	6.8		0	0	0

Upon scrutinizing the data, it becomes evident that, for Category 'B' motorcycles, which cater to customers seeking a balance between performance and cost-effectiveness, dealers place high importance on price (94.6%) and mileage (90%). These two factors top the list, closely followed by style and aesthetics (83.8%) and pick-up (60%). Safety and comfort, while still considered, do not take precedence in the decision-making process for customers in this category.

This ranking underscores the pragmatic preferences of customers in the 125cc segment, where economic considerations and aesthetics play significant roles in influencing their purchasing decisions.

## 2.3 Category C: Motorcycle 150cc - Dealers' Ranking of Important Factors

Within the realm of 150cc motorcycles, renowned for their performance and versatility, dealers' perspectives illuminate the paramount factors guiding customer choices. Presented below is a table showcasing how these factors are ranked by dealers on a scale from 1 (not at all important) to 8 (extremely important):

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**Table 4: Perception of Managers about ranking the important factors for Category C: Motorcycle 150cc**

Factors	Ranking							
	1 not at all important.	2	3	4	5	6	7	8 extremely important
Mileage	1.4	12.2	45.9	21.6	18.9	0	0	0
Price	0	1.4	6.8	17.6	10.8	62.2	1.4	0
Style and Aesthetics	0	1.4	0	0	0	1.4	41.9	55.4
Pick-up	0	0	0	0	0	4.1	52.7	43.2
Cost of maintenance	43.2	54.1	2.7	0	0	0	0	0
Comfort	0	1.4	4.1	29.7	37.8	24.3	2.7	0
Colour	51.4	13.5	16.2	4.1	10.8	1.4	2.7	0
Safety	2.7	16.2	28.4	27.0	20.3	5.4	0	0

Upon careful analysis of the data, it becomes evident that for Category 'C' motorcycles, which cater to enthusiasts seeking a balance between performance and style, dealers attribute the highest importance to style and aesthetics (97.3%) and pick-up (95.9%). These two factors prominently dominate the decision-making process for customers in this category. Interestingly, even though price (63.6%) is not the primary factor, it still holds significance, suggesting that customers in this segment compare brands based on pricing in addition to style, aesthetics, and power.

This ranking underscores the discerning tastes of customers in the 150cc segment, where the blend of style, performance, and affordability takes center stage in their purchase considerations.

#### 2.4 Category D: Motorcycle 150cc and above - Dealers' Ranking of Important Factors

Within the realm of motorcycles boasting 150cc and higher, renowned for their power and premium features, dealers' insights shed light on the paramount factors influencing customer choices. Presented below is a table showcasing how these factors are ranked by dealers on a scale from 1 (not at all important) to 8 (extremely important):

**Table 5: Perception of Managers about ranking the important factors for Category D: Motorcycle 150cc and above**

Factors	Ranking							
	1 not at all important.	2	3	4	5	6	7	8 extremely important
Mileage	0	14.9	81.1	4.1	0	0	0	0
Price	2.7	2.7	4.1	78.4	1.4	9.5	1.4	0
Style and Aesthetics	0	0	0	0	1.4	12.2	51.4	35.1
Pick-up	0	0	0	0	2.7	6.8	35.1	55.4
Cost of maintenance	14.9	74.3	6.8	4.1	0	0	0	0
Comfort	0	0	1.4	10.8	45.9	24.3	8.1	9.5
Colour	83.8	6.8	6.8	2.7	0	0	0	0
Safety	0	0	0	0	48.6	47.3	4.1	0

Upon meticulous examination of the data, it is evident that for Category 'D' motorcycles, designed for discerning customers seeking power and luxury, dealers attribute the highest importance to pick-up (90.5%) and style and aesthetics (86.5%). These two factors prominently dominate the decision-making process for customers in this category. Remarkably, safety (48.6%) and comfort (45.9%) also hold significant sway over customer choices, as indicated by the responses of two-wheeler managers.

This ranking highlights the multifaceted preferences of customers in the 150cc and above segment, where the fusion of power, style, safety, and comfort play pivotal roles in their purchase considerations.

#### 2.5 Category E: Scooterette - Dealers' Ranking of Important Factors

Exploring the unique realm of Category 'E' vehicles, specifically scooterettes, dealers' perspectives illuminate the critical factors influencing customer choices. Presented below is a comprehensive table illustrating how these factors are ranked by dealers, utilizing a scale ranging from 1 (not at all important) to 8 (extremely important):



**Table 6: Perception of Managers about ranking the important factors for Category E: Scooterette**

Factors	Ranking							
	1 not at all important	2	3	4	5	6	7	8 extremely important
Mileage	4.1	40.5	48.6	0	2.7	2.7	1.4	0
Price	2.7	1.4	18.9	55.4	8.1	6.8	6.8	0
Style and Aesthetics	0	0	0	0	17.6	21.6	39.2	21.6
Pick-up	1.4	33.8	20.3	27.0	16.2	1.4	0	0
Cost of maintenance	75.7	20.3	2.7	1.4	0	0	0	0
Comfort	0	0	0	2.7	2.7	12.2	25.7	56.8
Colour	16.2	2.7	9.5	12.2	39.2	17.6	2.7	0
Safety	0	1.4	1.4	0	13.5	40.5	23.0	20.3

Upon a meticulous evaluation of the data, it is evident that for Category 'E' Scooterettes, tailored to cater predominantly to female riders, dealers attribute the highest importance to comfort (56.8%) and style and aesthetics (39.2%). Remarkably, even males in their forties exhibit a growing affinity for these vehicles due to the paramount factor of comfort. Safety (40.5%) also emerges as a noteworthy consideration in this category.

This ranking underscores the multifaceted preferences within the Scooterette segment, where a harmonious blend of comfort, style, and safety plays a pivotal role in customer decision-making, catering to both the female demographic and a broader spectrum of riders.

**FINDINGS:**

**1. Category A: Motorcycle 100cc**

- Mileage (64.9%) and Price (60.8%) are the paramount factors influencing purchase decisions in this category.
- Customers in this segment exhibit a strong cost-conscious behavior.

**2. Category B: Motorcycle 125cc**

- Price (94.6%) is the most influential factor, followed by mileage (90%) and style and aesthetics (83.8%).
- Safety and comfort are less dominant in this category.

**3. Category C: Motorcycle 150cc**

- Style and aesthetics (97.3%) and pick-up (95.9%) dominate customer preferences.
- Price plays a significant role (63.6%) as well.

**4. Category D: Motorcycle 150cc and above**

- Pick-up (90.5%) and style and aesthetics (86.5%) are the primary factors influencing choices.
- Notably, safety and comfort are also considered by customers.

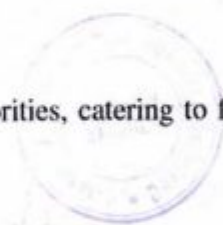
**5. Category E: Scooterette**

- Comfort (56.8%) and style and aesthetics (39.2%) are the top priorities, catering to female riders and older male consumers.
- Safety (40.5%) is another vital consideration in this category.

**SCOPE FOR FURTHER RESEARCH:**

Exploring the following areas could enhance our understanding of this domain:

1. **Customer Surveys:** Conduct surveys to validate if dealers' perceptions align with actual customer preferences.
2. **Regional Variations:** Investigate how preferences vary in different regions and cultures.
3. **Changing Trends:** Analyze how evolving market trends impact the factors influencing vehicle purchases.



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**LIMITATIONS:**

1. **Sample Size:** The study was limited to 74 out of 85 dealers in Pune, potentially introducing sample bias.
2. **Geographic Focus:** It primarily focuses on Pune, so the findings may not be entirely representative of the broader Indian market.

**SUGGESTIONS:**

Tailoring marketing strategies to align with the distinct preferences of each two-wheeler category is essential. For instance, in the Motorcycle 100cc segment, emphasizing affordability and fuel efficiency is key, while in the Motorcycle 150cc category, focusing on style and competitive pricing is crucial. Safety considerations, though varying in importance, should be addressed across all categories. Diversifying product offerings to match these preferences, ensuring price competitiveness, educating customers about value propositions, and embracing innovation to meet evolving demands are critical strategies to effectively capture the diverse customer base within the two-wheeler market.

**CONCLUSION:**

This research endeavour has provided valuable insights into the intricate landscape of the Indian two-wheeler market, elucidating the multifaceted factors that sway customer choices across different vehicle categories. The discerning analysis of dealers' perceptions has illuminated critical dimensions of consumer behavior, shedding light on the paramount significance of variables such as price, mileage, style, aesthetics, and safety in shaping purchase decisions.

The study underscores the nuanced nature of the Indian two-wheeler market, which caters to a heterogeneous clientele with divergent preferences. It is evident that the Indian consumer's quest for two-wheelers is not homogenous; instead, it reflects a complex interplay of economic considerations, aesthetic inclinations, and functional priorities. These findings are of profound relevance to industry stakeholders, offering them a compass to navigate the intricate market dynamics.

Nonetheless, it is imperative to acknowledge the limitations of this research, including sample size constraints and regional focus. The study leans on dealers' perspectives, which may not invariably align with the multifarious preferences of the broader customer base. Thus, while the study provides valuable insights, its findings must be interpreted judiciously in the broader context of the Indian two-wheeler landscape.

Looking ahead, further research endeavors hold the promise of augmenting our comprehension of this dynamic domain. Surveys targeting actual customers can offer corroborative evidence and provide a holistic perspective on the factors driving two-wheeler purchases. Exploring regional variations and evolving market trends can furnish a more comprehensive understanding, allowing industry players to tailor their strategies with precision.

In sum, this research illuminates the intricacies of the Indian two-wheeler market, affording valuable guidance to industry stakeholders aiming to navigate the diverse terrain of consumer preferences. It underscores the imperative for market players to remain agile, responsive, and attuned to the ever-evolving dynamics of this vibrant and competitive sector.

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## ELEVATING THE TWO-WHEELER EXPERIENCE: FACTORS SHAPING PURCHASE CHOICES AND POST-PURCHASE SATISFACTION

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### ABSTRACT

This study delves into the intricacies of the two-wheeler market, seeking to elevate the understanding of the multifaceted process involved in purchasing these versatile vehicles. The research unfolds in two dimensions: first, it endeavours to unearth the pivotal factors that sway consumers when making the pivotal decision to acquire a two-wheeler. Second, it rigorously evaluates the degree of post-purchase contentment experienced by owners in relation to the specific factors they considered during their decision-making journey.

Through a comprehensive examination of factors such as brand image, company image, price, mileage, and driving comfort, this research aims to dissect their individual and collective impacts on consumers' purchase decisions. By assessing post-purchase satisfaction levels in these areas, it endeavours to uncover the intricate connections between factor satisfaction and overall contentment with the chosen two-wheeler.

Furthermore, the study explores potential disparities in factor satisfaction across diverse demographic segments, providing valuable insights into variations in consumer preferences. Ultimately, the research culminates in actionable recommendations for manufacturers and dealerships, equipping them with strategies to enhance consumer satisfaction and effectively address the critical factors that significantly influence purchase decisions. This study is poised to illuminate the path toward elevated two-wheeler purchasing experiences and foster stronger consumer-brand relationships within the dynamic automotive market.

Our study employs a comprehensive research framework, combining quantitative and qualitative methodologies, to tease apart the key drivers of two-wheeler purchase decisions. By closely examining elements such as brand image, company reputation, price sensitivity, mileage expectations, and the quest for driving comfort, we aim to provide a nuanced understanding of what truly matters to consumers.

Furthermore, we assess the correlation between these factors and post-purchase satisfaction, recognizing that a fulfilling ownership experience is the ultimate litmus test of a well-informed choice. By charting the course from decision-making to real-world experiences, we hope to illuminate the path toward elevating the two-wheeler experience for consumers and industry stakeholders alike.

The research presents the results of our research, offering insights, recommendations, and a deeper appreciation of the factors that not only drive purchase decisions but also define the two-wheeler journey for riders around the world.





## INTRODUCTION

The global two-wheeler industry has experienced unprecedented growth and transformation, and at the epicentre of this seismic shift stands the Indian two-wheeler market. India, with its vast and diverse landscape, has emerged as one of the largest and most influential markets for two-wheelers worldwide. The nation's love affair with these nimble machines extends beyond mere utility; it embodies a cultural phenomenon, symbolizing freedom, affordability, and accessibility for millions of its citizens.

The Indian two-wheeler industry has a storied history, dating back to the early 1950s when iconic names like Royal Enfield and Bajaj first started rolling out motorcycles on Indian roads. Since then, the industry has undergone remarkable transformations, adapting to changing consumer preferences, regulatory shifts, and technological advancements.

In contemporary times, the Indian two-wheeler market has evolved into a dynamic ecosystem, characterized by a kaleidoscope of offerings. From the streets of bustling metropolitan cities to the remote corners of rural India, two-wheelers have become the lifeblood of mobility. They navigate congested traffic with ease, offer respite from skyrocketing fuel prices, and serve as a symbol of empowerment for millions of commuters, students, and enthusiasts.

The industry is home to a diverse range of players, from domestic giants such as Hero MotoCorp, Bajaj Auto, and TVS Motor Company, to international titans like Honda, Suzuki, and Yamaha. Each of these manufacturers brings its unique blend of technology, design, and marketing prowess to cater to the eclectic tastes and needs of the Indian consumer.

One cannot overstate the significance of the two-wheeler industry in India's economic tapestry. It is not only a major contributor to the country's GDP but also a vital source of employment, with numerous manufacturing units and dealerships dotting the landscape. Moreover, it plays a pivotal role in fostering micro-entrepreneurship through last-mile delivery services and ride-sharing platforms.

## NEED OF THE STUDY

The study on factors influencing two-wheeler purchase decisions and post-purchase satisfaction in the Indian context is imperative due to the sheer size and rapid growth of the Indian two-wheeler market. This market serves as a pivotal component of the Indian economy, with diverse consumer preferences, income levels, and regional dynamics. Understanding the nuanced factors that shape consumers' choices is vital for manufacturers, dealerships, and policymakers to adapt and thrive in this dynamic landscape. Furthermore, as the industry undergoes technological and regulatory transformations, such as the rise of electric two-wheelers and stringent emission standards, it becomes essential to gauge how these changes impact consumer behaviour. This study not only addresses the immediate needs of industry competitiveness but also contributes to the academic understanding of consumer behavior in a culturally rich and economically significant context.

## LITERATURE REVIEW

(Kathiravana, C., Panchanathama, N., & Anushan, S., 2010) explores the relationship between brand image, brand attitude, and perceived quality in the context of two-wheeler purchase decisions. It identifies influential variables that guide consumers in choosing durable products and suggests a strong relationship between brand image and consumer preferences.





(Rajini G. & A. Poornima, 2011) focuses on the demographic profile and factors affecting the purchasing decisions of two-wheeler customers in Vellore. The study found that affordability, comfort, customer care, and external influences were significant factors influencing customers' choices.

(Shaikh, 2012) focuses on identifying preferred two-wheeler manufacturing companies, popular brands, and consumer preferences in the two-wheeler market. It highlights the importance of understanding consumer needs and desires and suggests that Hero Motor Corp. and Honda Motorcycles are the most preferred manufacturers.

(M.Gomathi & R.Gomathi, 2013) examined customer preferences and satisfaction levels among two-wheeler users. The research focused on variables affecting customer loyalty, such as mileage, features, pickup, speed, and resale value. Sampling 400 users and employing statistical tools like Chi-square and factor analysis, the study found that respondents were generally satisfied with their two-wheelers and the dealer's overall performance.

(Dr. Duggani Yuvaraju & Prof. S. Durga Rao, 2014) founded that television was the most influential medium for customer awareness and factors like quality service and brand image were essential in purchase decisions. The study conducted in Tirupathi, involved Honda two-wheeler users. Satisfaction levels varied across factors, with mileage and performance being highly satisfying, while price and design were less satisfying.

(Dr.K. Lakshmi Priya, 2016) explores factors influencing customer preference for a specific two-wheeler brand. It highlights the importance of availability, product quality, and customer expectations. Respondents expressed a positive brand image for Honda bikes, leading to high

### OBJECTIVES OF THE STUDY

1. To identify the factors that significantly influence consumers when making decisions to purchase two-wheelers.
2. To measure and evaluate the level of satisfaction that two-wheeler owners regarding the factors they considered during the purchase decision.
3. To evaluate whether consumers' expectations align with their post-purchase experiences in terms of brand image, company image, price, mileage, and driving comfort.

### METHODOLOGY OF THE STUDY

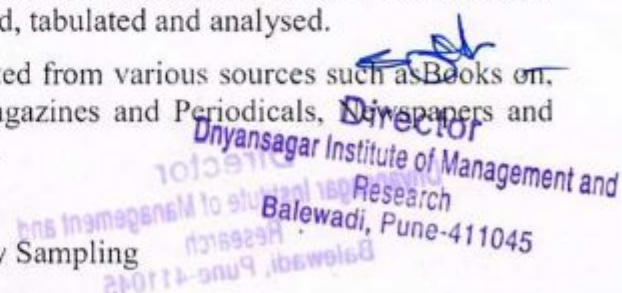
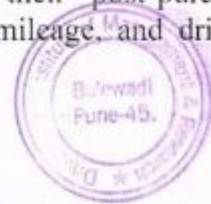
The data is collected from both primary and secondary sources:

**Primary data:** The two-wheeler customers were the set of respondents for the study who provided information related to their demographic profile, the purchase pattern towards buying a two-wheeler. The research instrument was developed which inculcated the 13 closed-ended questions and the responses were collected from 755 customers in two-wheeler dealer outlets, Pune. Their perceptions have been collected, tabulated and analysed.

**Secondary Data:** Secondary data has been collected from various sources such as Books, National and International Research Journals, Magazines and Periodicals, Newspapers and two-wheeler company annual reports and websites.

**Study Design:** Descriptive

**Sampling technique:** Convenience Non Probability Sampling







Sample size: 755

Study area: Pune

Data Collection Instrument: Structured Questionnaire

**SCOPE OF THE STUDY**

This study is focused on two-wheeler customers residing in Pune city and aims to understand the factors influencing their purchase decisions and post-purchase satisfaction. It specifically considers seven major two-wheeler companies operating in Pune, focusing on motorcycles and scooterettes. The study gathers primary data from first-hand two-wheeler users.

**DATA ANALYSIS**

**1. DEMOGRAPHIC PROFILE OF THE RESPONDENTS**

Within the framework of this study, the personal characteristics of the 755 respondents assume a pivotal role in shaping their responses and articulating their perspectives. These individual attributes encompass age, income, gender, educational qualifications, occupation, annual family income, and family size. The thorough examination and presentation of these demographic variables yield invaluable insights into the intricate interplay of these factors and how they collectively affect the purchase decisions of the respondents.

**TABLE 1 : DEMOGRAPHIC PROFILE**

<b>Gender</b>	Male 632 (83.7%)	Female 123 (16.3%)								
<b>Marital Status</b>	Single 486 (64.4%)	Married 269 (35.6%)								
<b>Age (in yrs)</b>	18-21 106 (14.0%)	21-25 305 (40.4%)	25-35 242 (32.1%)	35-50 83 (11.0%)	50 and above 50	19 (2.5%)				
<b>Qualification</b>	High School 15	SSC 43	HS C 95	Graduation 387	PG 21	5				
<b>Occupation</b>	Student 241	Professional/Business 195	Salaried 298	Housewife 17	Retired 4					



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<b>Annual Family Income (Rs.)</b>	Less than 1,50,000	23	1,50,000 to 2,50,000	175	2,50,000 to 5,00,000	253	5,00,000 and 10,00,000	179	10,00,000 and above	125
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The respondents were from Pune city and they differed in demographic aspects such as Income group, Educational qualifications, Occupation. Of the total sample of 755 respondents, 632 (83.7%) were males and remaining 123 (16.3%) were females. There were 33.2% males belonging the age between 21-25 yrs. and 27.3% males belonging the age between 25 - 35 yrs. There were 7.2% females belonging to the age between 21-25 yrs. and 4.8% females belonging the age between 25-35 yrs. There were only 19 respondents (16M, 3F) who were above the age of 50 yrs. and 11% were in age group of 35-50 yrs. consisting of 74 (9.8%) males and 9 (1.2%) females. It has been observed that the 486 number of the respondents (64%) were married and remaining (35.6%) were unmarried. Majority of the respondents were married since the average respondents were from late adolescent age group. From the above table it is inferred that the 39.5% of the respondents are salaried, 31.9% of respondents are students, 25.80% of the respondents are professionals or businessmen, 2.3% of the respondents are housewife and remaining 0.5% of the respondent are retired. It can be inferred that the highest group using two wheeler is the one who belong to salaried class. It has been observed that 144 (19.1%) respondents were found to be graduates with an earnings between Rs. 2.5 – 5 lacs as annual household income. There were only 11 (1.1%) respondents who had low educational qualification as well as low income (HSC and below HSC with less than Rs. 1.5 Lacs annual income). So, it may be concluded that majority of the two wheeler respondents are well educated and highly qualified and the annual average income household income is above Rs. 1.5 Lacs.

## 2. IMPORTANCE OF FACTORS IN PURCHASE DECISION

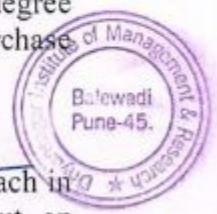
The respondents were also requested to rate identified factors (Brand Image, Company Image, Price, Mileage, Driving Comfort, etc.) that had a consideration on their purchase decision. The respondents were requested to rank these factors on a five point scale, where 1 meant not at all important and 5 meant extremely important. Further this data was analysed to find any correlations between the demographic variables and the affecting variables.

The researcher has used different parameters to analyse and establish association between different variables. These different parameters are taken considering their role in the buying pattern and sales practices of the two wheeler companies. The parameters are Age Gender, Occupation and Annual Family Income.

When it comes to choosing one product versus another, customers whether consciously or subconsciously assess a variety of factors. The customers were also enquired about the degree of importance they give to various factors of attraction compelling them for purchase decisions. The information in this regard is shown in Tables below.

### 2.1 BRAND IMAGE

Brand image is nothing but the customer's perception about the product. It is the approach in which a specific brand is positioned in the market. Brand image is nothing but an



*Handwritten signature and blue ink stamp of the Institute of Management & Research, Balowadi, Pune-411045.*





organization's character. The brand image is purely an impression of the brand created over a timeframe in the consumer's mindset by the two wheeler companies.

**TABLE 2: RATING OF BRAND IMAGE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	24	3.2
2	12	1.6
3	57	7.5
4	244	32.3
Extremely important	418	55.4
Total	755	100.0

This image of a brand is ultimately a deciding factor that determines the product sales. From this point of view when one analyses the responses, it is noticed that 87.7% of respondents considers brand image as important determinant of buying decision.

## 2.2 COMPANY IMAGE

The image of a company has an enormous effect as it signals the brains of the customer while considering the purchase of a two wheeler. The reputation of a company goes before it in the market in this manner drawing in customers just by the name. Consequently it's essential that each company guarantees that the company image is constantly connected with positive feelings in the brains of the customers.

**TABLE 3: RATING OF COMPANY IMAGE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	22	2.9
2	79	10.5
3	354	46.9
4	298	39.5
Extremely important	2	0.3
Total	755	100.0

he data presented in the above table indicates that company image is rated important as a basic consideration for buying a particular vehicle. 39.8% of the respondents have rated company image as important factor. The reputation of a company is essential to its survival. The trust and confidence of the consumer can have a direct and profound effect on a company's image.

## 2.3 PRICE

Price is the first consideration, for initial affordability for a customer. When buying a two wheeler, many customers determine the value that a vehicle offers by comparing the price with the features and benefits

**TABLE 4: RATING OF PRICE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	41	5.4
2	108	14.3
3	256	33.9
4	348	46.1





Extremely important	2	0.3
Total	755	100.0

As per the responses Price is important. The information presented above indicates that, 46.4% of respondents have rated Price as an important factor when it comes to purchase decision towards a particular brand. Thus, Price is certainly the most significant and important influencing factor for customer during the basic decision making process.

#### 2.4 FUEL ECONOMY

With increasing petrol costs, the mileage component is an influencing factor while buying a two wheeler. The main selling point of any two wheeled vehicle is the fuel economy that it offers to the customer. A smaller-sized engine capacity two wheeler will give great fuel economy whereas a bigger engine capacity will have more power and will get low fuel economy. Mileage of a two wheeler may differ from consumer to consumer due to the vehicle riding method, petrol used and addition of extra accessories or custom made modifications inside the two wheeler.

**TABLE 5: RATING OF FUEL ECONOMY/MILEAGE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	43	5.7
2	89	11.8
3	286	37.9
4	335	44.4
Extremely important	2	0.3
Total	755	100.0

In this study, it is observed that fuel economy emerged as the important factor while making the purchase decision. In purchasing a two wheeler vehicle, 44.7% respondents have rated fuel economy important factor while making the purchase decision.

#### 2.5 DRIVING COMFORT

Comfort is the factor which while driving a two wheeler makes the journey a pleasure and not a hardship. An ergonomically designed seat assumes a significant part to improve the driving solace. Self-start eases customers from the pressure of kicking and thus adding to the driving solace.

**TABLE 6: RATING OF DRIVING COMFORT AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	38	5.0
2	114	15.1
3	317	42.0
4	285	37.7
Extremely important	1	.1
Total	755	100.0

In this study, it is observed that driving comfort is also an important factor considered while purchasing. In purchasing a two wheeler vehicle, 37.7% respondents have rated driving comfort as an important factor while making the purchase decision. Neutral response is from





42% of the respondents where as 20.1% respondents have rated driving comfort as not important factor while considering a two wheeler for purchase.

## 2.6 SAFETY

TABLE 7: RATING OF SAFETY AS AN INFLUENCING FACTOR

	Frequency	Percent
Not at all important	35	4.6
2	91	12.1
3	292	38.7
4	335	44.4
Extremely important	2	.3
Total	755	100.0

44.4% customers have rated that safety features as the important factor considered while preferring a two wheeler and 38.7% customers have given neutral response to the level of importance for safety features considered while preferring a two wheeler. Thus, it is inferred that majority of the customers agreed that they give importance to safety features while preferring a two wheeler but they also consider other factors like Price, Mileage and Brand Image more important to Safety.

## 2.7 PICK UP

Pick up means power, speed, acceleration and brakes of the two wheeler. Today, many people, mostly youngsters are fascinated by the word "cc". The customer believes that higher the cc, better the two wheeler is. Two wheeler with higher cc (cubic centimeter) are good as they produce more pick up and power and go faster. The two wheeler has consistently increased the power output of its engines while emphasizing fuel economy

TABLE 8: RATING OF PICK UP AS AN INFLUENCING FACTOR

	Frequency	Percent
Not at all important	44	5.8
2	122	16.2
3	293	38.8
4	294	38.9
Extremely important	2	.3
Total	755	100.0

Pick up is the factor considered while purchasing a two wheeler. Thus, it is inferred that 38.9% of the customers feel that pick up is an important factor whereas 38.8% respondents are neutral to their response. 22% of the respondents feel pick up as not so important factor to consider while purchasing a two wheeler.

## 2.8 COLOUR

Colours play an important role in conscious and unconscious purchasing decisions. Colours focus on the mood of the era. The vehicle product available in the market comes in a wide variety of colours that is eye catching and trendy. The colours are eclectic and attract customers.

  
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TABLE 9: RATING OF COLOUR AS AN INFLUENCING FACTOR

	Frequency	Percent
Not at all important	78	10.3
2	146	19.3
3	317	42.0
4	213	28.2
Extremely important	1	.1
Total	755	100.0

Colour of the two wheeler is the factor considered while purchasing a two wheeler. But as per the information presented in the Figure, it is inferred that majority of the customers 29.6% have not rated colour as an important factor whereas 42% respondents are neutral to their response. Hence Colour is not an extremely important factor while deciding the two wheeler purchase

## 2.9 LATEST TECHNOLOGY

New technologies and trends are driven by changing customer demands as well as government regulations regarding safety and environmental concerns. India is the most competitive two-wheeler market in the world. Here, technologies get outdated in a short span of time. To stay in the quest, all the major two-wheeler companies give their best to update technologies as per the consumers demand.

TABLE 10: RATING OF LATEST TECHNOLOGY AS AN INFLUENCING FACTOR

	Frequency	Percent
Not at all important	38	5.0
2	123	16.3
3	292	38.7
4	301	39.9
Extremely important	1	.1
Total	755	100.0

From the data presented above it indicates that the trend is more towards neutral reaction. 38.7% of the respondents have rated latest technology as neutral as non-affecting factor while considering the purchase.

## 2.10 RELIABILITY

With recent trends in two wheeler industry it has shown an increasing importance of reliability as a influencing factor while buying. Customers look at the two wheeler product as a long term investment which should run well with minimum setbacks. Reliability means different things to different two wheeler buyers everything from quality to fuel efficiency to utility.

TABLE 11: RATING OF RELIABILITY AS AN INFLUENCING FACTOR

	Frequency	Percent
Not at all important	52	6.9
2	145	19.2
3	333	44.1





4	224	29.7
Extremely important	1	.1
Total	755	100.0

From the information presented in table above, it clearly indicates 26.1% of the respondent have rated reliability factor as not so important factor the customer considers while making purchase decision. 44.1% of the respondents have reacted neutrally towards reliability factor.

### 2.11 INTERNAL SPACE / STORAGE SPACE

A motorcycle is compact but two wheeler companies have designed storage space in scooterettes segment which are mainly used to keep the helmet, raincoats, documents or small bags. This feature is especially attractive to women riders who can utilize this space for their purses and phones also. Storage space is required by users as small closet for valuables like documents and tool kits.

**TABLE 12: RATING OF INTERNAL SPACE / STORAGE SPACE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	140	18.5
2	183	24.2
3	261	34.6
4	167	22.1
Extremely important	4	.5
Total	755	100.0

As 42.7% of the respondents feel internal storage space is not an important factor while deciding the two wheeler purchase. As there are other factors the customers give importance while deciding the purchase like brand image, price, fuel economy.

### 2.12 STYLE AND AESTHETICS

Today the consumers want a well-designed product to match their style. Many customers go by style and aesthetics of a two wheeler. Aesthetics and Style plays an important role in purchase decision of the customer. From this point of view, customers responses to style and aesthetics has studied by the researcher.

**TABLE 13: RATING OF STYLE AND AESTHETICS AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	57	7.5
2	118	15.6
3	317	42.0
4	262	34.7
Extremely important	1	.1
Total	755	100.0

From the data so presented above, a majority 34.8% of respondents have considered style and aesthetics as an important factor while deciding to purchase. Style and Aesthetics has been used by two wheeler companies for branding and as a differentiating factor in the competitive two wheeler market. Style and Aesthetics are important for creating a positive user







experience. There are number of two wheeler models available in the market and it is important that the style and aesthetics of the two wheeler are as per the taste of customers. Style and Aesthetics enhances the visual appeal and additionally creates the sensory experience.

### 2.13 MAINTENANCE COST

Servicing and maintenance of a two wheeler is essential for its proper functioning. This factor weighs heavily in making an informed buying decision for a suitable two-wheeler as it has a direct bearing on the running cost of the two wheeler. To increase the durability of a two wheeler the customer should go for servicing of two wheeler at regular intervals.

**TABLE 14: RATING OF MAINTENANCE COST AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	51	6.8
2	126	16.7
3	340	45.0
4	237	31.4
Extremely important	1	.1
Total	755	100.0

To what extent is the importance of maintenance cost to the respondents is represented in the aboveFigure. The data indicates that maintenance cost (31.5%) is an important factor while deciding the two wheeler purchase, but it is not the principle decision making input of buying as given by the respondents.

### 2.14 RESALE VALUE

Even before buying a bike, you have to consider its resale value. Before purchasing a bike, you need to be able to answer these questions. "How long will I drive this bike?" and "What is the general popularity of the bike you chose to buy?" Answers to these questions help us determine the resale value when we trade up. However, our diligence in taking care of the bike is an important factor that decides the resale value. A vehicle which is still in production (at the time of resale) will fetch a higher value. In addition, factors like maintenance, service center network and mileage clocked can make or break a deal.

**TABLE 15: RATING OF RESALE VALUE AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	78	10.3
2	178	23.6
3	301	39.9
4	194	25.7
Extremely important	4	.5
Total	755	100.0

The data indicates that the customers do feel the importance of resale value however it appears that buying decision is not much affected by the factor - Resale value. Other factors like Brand, Company Image, Mileage, Price and Driving Comfort dominates the buying considerations.





### 2.15 SERVICE NETWORK

Geographic distribution of service centers is important in terms of providing accessibility to the customer. The two wheeler company selected by the customer should have an extensive network of service centers providing servicing and easy availability of spare parts.

**TABLE 16: RATING OF SERVICE NETWORK AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	56	7.4
2	128	17.0
3	328	43.4
4	241	31.9
Extremely important	2	.3
Total	755	100.0

Each and every two wheeler company has a the service network for service facilities that need to be extended to the customer after purchase. Servicing the two wheelers after a customer purchases is important to the two wheeler users. The data indicates the importance but does not influence the buying behaviour to a great extent.

### 2.16 ACCESSORIES

One of the greatest things about owning a two wheeler is the ability to customize it to match your riding needs and personalities. Accessories add to the style and safety of the two wheeler.

**TABLE 17: RATING OF ACCESSORIES AS AN INFLUENCING FACTOR**

	Frequency	Percent
Not at all important	56	7.4
2	170	22.5
3	324	42.9
4	204	27.0
Extremely important	1	.1
Total	755	100.0

From the above data it specifies the importance of accessories however it appears that the buying behaviour is not much affected by the factor – Accessories.

### 3.1 CUSTOMER SATISFACTION WITH REGARDS TO BRAND IMAGE

**TABLE 18: RATING OF BRAND IMAGE AS PER CUSTOMER SATISFACTION**

	Frequency	Percent
Highly dissatisfied	9	1.2
Dissatisfied	8	1.1
Neither satisfied nor dissatisfied	78	10.3
Satisfied	368	48.7
Highly satisfied	292	38.7
Total	755	100.0

From the table above it depicts that 87.4% of respondents are satisfied with the brand image after purchasing the two wheeler. It can be concluded that majority of the customers who





rated brand images as an important factor while purchase consideration are satisfied with the brand image.

### 3.2 CUSTOMER SATISFACTION WITH REGARDS TO COMPANY IMAGE

**TABLE 19: RATING OF COMPANY IMAGE AS PER CUSTOMER SATISFACTION**

	Frequency	Percent
Highly dissatisfied	15	2.0
Dissatisfied	14	1.9
Neither satisfied nor dissatisfied	110	14.6
Satisfied	396	52.5
Highly satisfied	220	29.1
Total	755	100.0

From the above table it depicts that 71.6% of respondents are satisfied with the company image after purchasing the two wheeler.

### 3.3 CUSTOMER SATISFACTION WITH REGARDS TO PRICE

**TABLE 20: RATING OF PRICE WITH REGARDS TO CUSTOMER SATISFACTION**

	Frequency	Percent
Highly dissatisfied	13	1.7
Dissatisfied	22	2.9
Neither satisfied nor dissatisfied	149	19.7
Satisfied	372	49.3
Highly satisfied	199	26.4
Total	755	100.0

The above table shows 49.3% are satisfied with the price and 26.4% of respondents are highly satisfied with the price of the two wheeler purchased.

### 3.4 CUSTOMER SATISFACTION WITH REGARDS TO FUEL ECONOMY

**TABLE 21: RATING OF FUEL ECONOMY/MILEAGE WITH REGARDS TO CUSTOMER SATISFACTION**

	Frequency	Percent
Highly dissatisfied	11	1.5
Dissatisfied	45	6.0
Neither satisfied nor dissatisfied	150	19.9
Satisfied	342	45.3
Highly satisfied	207	27.4
Total	755	100.0

As the table above depicts 72.7% of the respondents were satisfied with the fuel economy provided by the two wheeler owned.

  
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### 3.5 CUSTOMER SATISFACTION WITH REGARDS TO DRIVING COMFORT

**TABLE 22: RATING OF CUSTOMER SATISFACTION WITH REGARDS TO DRIVING COMFORT**

	Frequency	Percent
Highly dissatisfied	12	1.6
Dissatisfied	30	4.0
Neither satisfied nor dissatisfied	138	18.3
Satisfied	361	47.8
Highly satisfied	214	28.3
Total	755	100.0

From the table presented above it reflects that 76.1% respondents are satisfied with the important factor driving comfort. In this study, it is observed that driving comfort is an important factor considered while purchasing and 37.7% respondents have rated driving comfort as an important factor. 42% of the respondents were with neutral response towards importance of comfort and may be the customers have not considered its importance level while purchasing and after purchasing may be the customer have experienced the comfort level and are satisfied after purchase of the two wheeler.

### 4. MEAN GAP ANALYSIS

The researcher tried to identify the mean gap for the 16 factors influencing the purchase decision with the level of importance in consideration at the time of purchase and level of satisfaction while using the two wheeler.

**TABLE 23: MEAN GAP ANALYSIS PRODUCT RELATED INFLUENCING FACTOR**

Parameters	Mean of Level of importance in consideration at the time of purchase	Mean of Level of satisfaction while using	Gap score
Brand Image	4.35	4.23	- 0.12
Company Image	3.24	4.05	0.81
Price	3.21	3.96	0.75
Fuel Economy/ Mileage	3.22	3.91	0.69
Driving Comfort	3.13	3.97	0.84
Safety	3.24	3.92	0.68
Pick up	3.12	3.94	0.82
Colour	2.88	3.88	1.00
Latest Technology	3.14	3.85	0.71
Reliability	2.97	3.76	0.79
Internal Space / storage space	2.62	3.50	0.88
Style and Aesthetics	3.04	3.89	0.85
Maintenance Cost	3.01	3.73	0.72
Resale Value	2.83	3.52	0.69
Service Network	3.01	3.77	0.76
Accessories	2.90	3.76	0.86







The table presents a comprehensive Mean Gap Analysis of product-related factors influencing the purchase decision and the level of satisfaction while using two-wheelers. This analysis offers valuable insights into the alignment between customer expectations during the purchase process and their actual satisfaction while using the product.

Notably, the majority of factors demonstrate a positive gap score, indicating that customers are not only satisfied but also find the product-related factors to be even more important than they initially considered during their purchase decision. This suggests that the two-wheeler companies have successfully met or exceeded customer expectations in these areas.

However, the brand image factor stands out with a negative gap score of -0.12. While customers still express satisfaction with this aspect, the slightly lower rating suggests that there may be room for improvement in enhancing the brand image to better align with customer expectations.

Overall, this analysis highlights the effectiveness of the sales practices adopted by two-wheeler companies. It underscores their ability to meet or surpass customer expectations in most product-related factors, thereby contributing to customer satisfaction and loyalty. Nevertheless, the findings also indicate that continuous efforts to enhance brand image can further strengthen the customer-company relationship and solidify the brand's position in the market.

## SUGGESTIONS

Following the comprehensive research on factors influencing two-wheeler purchase decisions and post-purchase satisfaction, few suggestions:

- Manufacturers: Prioritize building brand image, offer competitive pricing, and invest in R&D for enhanced features. Tailor strategies to demographics and effectively communicate brand values and features.
- Dealerships: Invest in staff training, create positive showroom experiences, and prioritize customer service.

## CONCLUSION

This study has provided valuable insights into the factors influencing two-wheeler purchase decisions and post-purchase satisfaction among consumers in Pune city. Through a comprehensive analysis of demographic variables and the mean gap between perceived importance during purchase and satisfaction while using two-wheelers, it is evident that certain factors significantly impact decision-making processes, while others play a crucial role in shaping overall satisfaction. These findings offer essential guidance for manufacturers, dealerships, and policymakers in the two-wheeler industry, emphasizing the importance of aligning customer expectations with real-world experiences to enhance consumer satisfaction and loyalty.

In conclusion, our study rigorously examined and gained a deeper understanding of the factors influencing two-wheeler purchase decisions and post-purchase satisfaction among diverse consumer segments in Pune city.

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## UNVEILING THE KEY FACTORS SHAPING TWO-WHEELER SALES PROCESS DESIGN: INSIGHTS FROM DEALER MANAGERS

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### ABSTRACT

This study delves into the critical factors that mold the design of the sales process from the perspective of two-wheeler dealer managers. Using a rating scale ranging from 1 to 5, where 1 signifies the lowest importance and 5 signifies the highest importance, dealer managers provide their insights into various elements influencing the sales process. These elements include layout and interior, location, product display, attractive discount offers, helpful and courteous sales staff, availability of product range, exchange offers, ease and efficiency of the sales procedure, finance facility, test ride availability, and vehicle delivery commitments.

The research reveals the significance attached to each of these factors in the eyes of dealer managers and offers valuable insights into their role in shaping the sales process. By understanding the priorities and preferences of dealer managers, this study contributes to enhancing the effectiveness of sales processes within the two-wheeler industry. This research aims to shed light on the critical factors influencing the design of the sales process in the two-wheeler industry as perceived by dealer managers, ultimately contributing to the enhancement of sales practices and customer experiences in this highly competitive market.

It provides manufacturers and marketers with essential guidance on optimizing their sales strategies in a competitive market, where attention to these factors can make all the difference in influencing consumer decisions.

**KEYWORDS:** Two-wheeler industry, Sales process design, Dealer managers, Customer experience  
Sales strategy optimization

### INTRODUCTION

The Indian two-wheeler industry has witnessed remarkable growth over the years, fueled by factors such as increased urbanization, rising disposable incomes, and the need for affordable and convenient personal transportation. This burgeoning market offers a plethora of choices to consumers, ranging from motorcycles to scooters, catering to diverse preferences and requirements. Within this industry, the role of dealer managers is paramount, as they serve as the bridge between manufacturers and customers.

Dealer managers are responsible for orchestrating the sales process, from showcasing the latest models in their showrooms to guiding customers through the decision-making journey. Their understanding of what drives customers' choices and influences their decisions is instrumental in shaping the sales strategies and practices employed by two-wheeler manufacturers. To excel in this competitive market, manufacturers must align their offerings with the expectations and priorities of dealer managers.

In this context, this research embarks on a comprehensive exploration of the factors that significantly influence the design of the sales process, as perceived by two-wheeler dealer managers. These factors encompass a wide spectrum, including showroom layout, location, product presentation, promotional





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offers, and the demeanor of sales staff, product range, exchange programs, sales efficiency, financing options, test ride availability, and delivery commitments.

## NEED OF THE STUDY

The need for this study can be summarized as follows:

1. **Industry Competitiveness:** The two-wheeler industry is highly competitive, and understanding the key factors that influence the sales process is essential to gain a competitive edge.
2. **Dealer Manager Perspectives:** Dealer managers play a pivotal role in sales operations, and their insights are valuable for improving sales practices and processes.
3. **Customer Experience:** Enhancing the customer experience is crucial in a competitive market, and this study aims to identify the factors that impact it.
4. **Manufacturer and Marketer Guidance:** Manufacturers and marketers in the two-wheeler industry can benefit from the insights provided by this research to optimize their sales strategies.
5. **Consumer Decision-Making:** The study recognizes that attention to specific factors can influence consumer decisions, which is of great importance for businesses in this industry.

## LITERATURE REVIEW

(Shane Baxendale, 2015) introduces an approach to assess the impact of different marketing touch points (e.g., brand advertising, retailer advertising, in-store communication) on brand consideration. It highlights the importance of in-store communication and peer observation, while also emphasizing the role of emotional response and frequency for better resource allocation in marketing.

(Mohd. Talha Khan, 2015) applied the SERVQUAL model to assess service quality in the two-wheeler automobile industry, specifically for Hero, Bajaj, and Honda in Lucknow, Moradabad, and Noida. The findings revealed that Bajaj had the highest perceived service quality, followed by Hero and Honda. Notably, there was a perception-expectation gap for Hero and Honda users but not for Bajaj customers.

(Pansari, 2017) study offers a framework for customer engagement (CE) based on satisfaction and emotional connection. It explores the components, antecedents, and outcomes of CE, along with factors that influence these links. The study also provides strategies for improving customer engagement and enhancing firm performance.

(Sriyogi, 2017) uses AHP and TOPSIS to assess the factors influencing Indian customers' two-wheeler purchase decisions. The critical factors include high pick-up, fuel efficiency, spare parts pricing, unique design, and gear-shifting ease. Furthermore, the study identifies popular two-wheeler models based on price, capacity, horsepower, and weight, providing essential insights into Indian two-wheeler buyers' preferences.

## OBJECTIVES

The primary objectives of this study are as follows:

1. To assess the perceptions and opinions of two-wheeler dealer managers regarding the factors that significantly influence the design of the sales process.
2. To gain insights into the dealer managers' perspectives on the role of elements such as layout and interior, location, product display, attractive discount offers, helpful and courteous sales staff, availability of product range, exchange offers, ease and efficiency of sales procedure,



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finance facility, test ride availability, and vehicle delivery commitments in shaping the sales process.

### METHODOLOGY OF THE STUDY

The research methodology employed in this study encompasses several key elements:

- 1. Research Design:** This study adopts a quantitative research design, utilizing a rating scale ranging from 1 to 5. Dealer managers provide their evaluations of various factors that influence the sales process within the two-wheeler industry.
- 2. Data Collection:** In this study, data collection was carried out through structured interviews involving 74 two-wheeler dealer managers in Pune city. These managers were selected to represent dealerships associated with well-known two-wheeler manufacturers, which include Hero Moto Corp, Bajaj Auto Ltd., Honda Motorcycle and Scooters India Pvt. Ltd., Yamaha Motors India, TVS Motors Company Limited, Mahindra Two Wheelers Limited, and Suzuki Motorcycle India Pvt. Ltd.
- 3. Sampling:** The study selects a sample of dealer managers from various two-wheeler dealerships to ensure diversity and representation within the industry. The research methodology described indicates that the study used a census sampling technique to include all 85 identified two-wheeler dealer managers in Pune city. Nevertheless, data was obtained from 74 respondents, as 11 managers declined to provide business information.
- 4. Data Analysis:** Quantitative data analysis methods are employed to calculate the average ratings for each factor, revealing the relative importance of these elements as perceived by dealer managers.

### SCOPE OF THE STUDY

This study has a narrow focus on the two-wheeler industry, emphasizing the perspectives of dealer managers. It assesses the importance of various factors influencing the sales process, such as layout, location, staff courtesy, discounts, and more, using a rating scale. The main objective is to provide valuable insights to enhance sales practices and customer experiences in this highly competitive market. It also seeks to guide manufacturers and marketers in optimizing their strategies and recognizes the pivotal role these factors play in influencing consumer decisions.

### RESULT & ANALYSIS

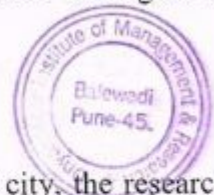
#### 1. PROFILE OF DEALERS

In the pursuit of understanding the dynamics of the two-wheeler market in Pune city, the researcher engaged with a total of 85 two-wheeler dealers. Out of this comprehensive sample, valuable insights were successfully gathered from 74 two-wheeler dealers in Pune city.

The distribution of these dealers across various two-wheeler companies is outlined in table below:

**TABLE 1: NO OF DEALERS OF TWO WHEELER COMPANY**

	Frequency	Percent
Bajaj	11	14.9
Hero MotoCorp	12	16.2
TVS	14	18.9
Yamaha	8	10.8
Honda	15	20.2
Suzuki	6	8.2
Mahindra & Mahindra	8	10.8





Total	74	100.0
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From the above data, it becomes evident that the research has successfully encompassed a diverse range of two-wheeler companies. Honda emerges as the leading company represented among the dealers, commanding a significant share of 20.2%. TVS and Hero MotoCorp closely follow with 18.9% and 16.2% respectively. Bajaj secures 14.9%, while Mahindra & Mahindra and Yamaha each account for 10.8%. Suzuki, though represented by a smaller number, contributes to the research with 8.2%.

This diverse profile of dealers ensures a comprehensive and holistic understanding of the two-wheeler market in Pune city, providing valuable insights into the preferences and perceptions of dealers associated with prominent two-wheeler manufacturers.

## 2. TWO-WHEELER DEALER MANAGERS' PERSPECTIVES ON PRE-SALES FACTORS

Consumer psychology varies and is different for different classes of consumers. How the consumer responds to a sales process often depends on type of target consumers, their preference, choices and values. Hence the researcher had established eleven different parameters as major factors on the basis of importance while designing the sales process. The rating of these parameters from managers' point of view is presented in table

### A. LAYOUT AND INTERIOR

Two wheeler dealers sell dreams. The layout and interior of the dealership removes the physical and psychological barriers between customers and dream two wheeler vehicle.

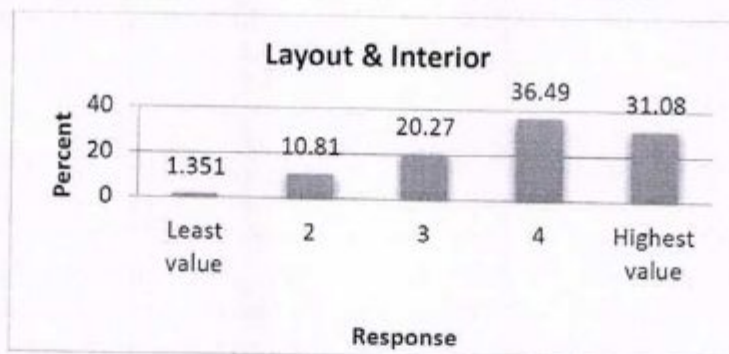


Figure 1: Rating by the Manager regarding layout and interior of the dealership

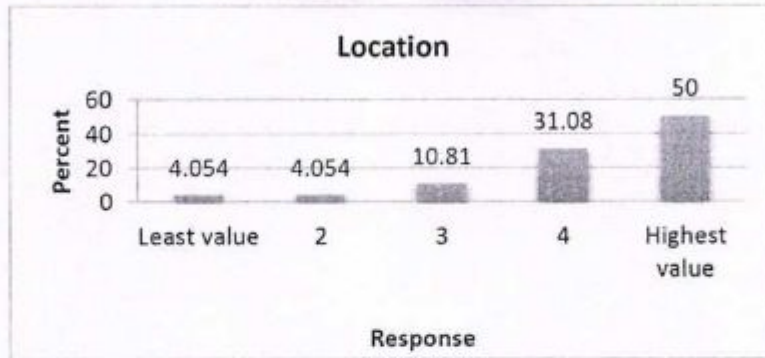
The data presented in the figure highlights the crucial role of dealership layout and interior, with 67.6% of dealers emphasizing its significance. This underscores the importance of maintaining a well-designed and appealing physical environment for two-wheeler dealerships. Such an environment not only attracts customers but also ensures their comfort and satisfaction during initial interactions with the brand and its products. Therefore, two-wheeler companies should prioritize and uphold high standards in this aspect of dealership design to enhance customer perceptions and experiences.

### B. LOCATION

When designing the pre-sales process, the choice of location is paramount. It needs to prioritize convenience for customers while also fostering walk-in traffic. Ideal dealership locations are those situated in highly visible areas with easy access to main transport routes, and they feature an attention-grabbing facade.

  
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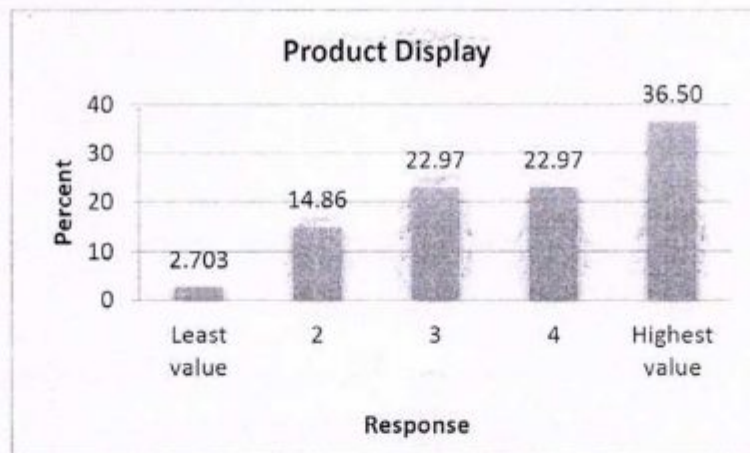


**Figure 2: Rating by the Manager regarding Location of the dealership**

As illustrated in figure, a substantial 81.2% of dealers have emphasized the importance of the dealership's location in the design of the sales process. This data highlights the critical role that location plays in shaping the success of a dealership's operations. Given the high rating of location by dealers, it becomes evident that selecting the right location is a crucial decision for dealerships. A strategic location that is easily accessible to both existing customers and potential prospects is not only a convenience but also has a direct impact on sales and overall profitability.

### C. PRODUCT DISPLAY

The product display is a pivotal factor in captivating and retaining the attention of customers. A well-executed product presentation contributes to the allure and intrigue of these machines. Dealerships typically showcase their top-of-the-line and latest models prominently at the front, recognizing that visual appeal often paves the way for test drives.



**Figure 3: Rating by the Manager regarding product display in the dealership**

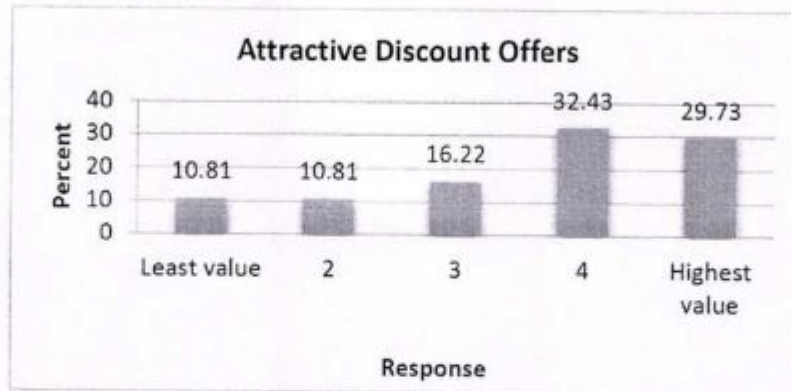
From the information presented, a substantial 59.5% of dealers underscore the importance of displaying products effectively to stimulate purchases. They acknowledge that the two-wheeler display should serve as an inviting enticement to passers-by. Dealer managers emphasize that a well-conceived product display not only encourages sales but also piques the curiosity of potential customers.

### D. ATTRACTIVE DISCOUNT OFFERS

Discounts constitute an integral element of business strategy in the two-wheeler dealership realm. These incentives encompass regular offerings presented by dealerships in various forms, such as special schemes, festive discounts, alluring deals, and promotional gifts.

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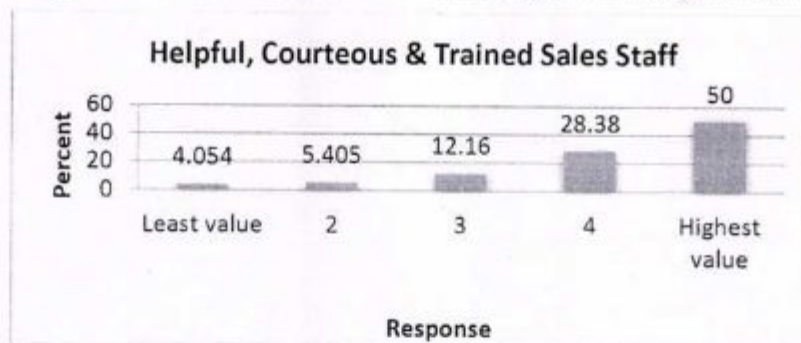


**Figure 4: Rating by the Manager regarding attractive discounts offers of the dealership**

Based on the data provided, it is evident that 62.1% of dealers consider attractive discount offers to be a crucial factor in shaping their sales processes. The provision of free gifts and other price reductions often proves effective in enticing buyers. Discounts and appealing offers have the potential to not only drive purchases among existing customers but also attract new ones. Additionally, they can divert customers from competitors and revitalize business, particularly during sluggish periods.

**E. HELPFUL, COURTEOUS AND TRAINED SALES STAFF**

Most potential buyers reach out to dealerships to gather information that aids in their purchase choices. In this context, the sales team's role is paramount, requiring them to engage with prospects confidently and establish a genuine connection through warm interactions, like a hearty handshake. Their courteous and helpful demeanor contributes to building trust with potential buyers.



**Figure 5: Rating by the Manager regarding Helpful, Courteous and Trained Sales Staff of the dealership**

Analysis of the data reveals that a significant 78.4% of dealers place a high value on the presence of a helpful, courteous, and well-trained sales staff. It is imperative for dealerships to focus on retaining such valuable talent, as it not only enhances the potential for repeat sales but also fosters strong customer relationships.

**F. AVAILABILITY OF PRODUCT RANGE**

In today's fiercely competitive market, two-wheeler companies are vigorously diversifying their product offerings to cater to customer demands. This fierce competition ultimately benefits consumers who now have a wider array of brand and model choices than ever before. Consequently, the product range has become the hallmark of a two-wheeler company in the modern market.

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## HARMONIZING DIGITAL HORIZONS: UNVEILING CUSTOMER USAGE PATTERNS IN MOBILE WALLETS

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### ABSTRACT

This study, conducted in Pune, Maharashtra, examines the usage patterns of mobile wallets, among 700 respondents. The research aims to gain insights into the motivations behind mobile wallet adoption, frequency of usage, the impact of security concerns, and the factors influencing the adoption of mobile wallet. The demographic profile of respondents, including gender, age, education, occupation, and income, is also analyzed.

The study employs a descriptive research design and utilizes both primary and secondary sources of data. Primary data is collected through structured questionnaires, interviews, and conversations, while secondary data is sourced from books, journals, and other relevant publications. The non-probability convenience sampling method is used for data collection.

Results indicate that respondents primarily use mobile wallets for frequent transactions such as online shopping and utility bill payments. Security concerns, though present, do not significantly deter usage. Factors influencing adoption include instant payment, discounts, and cashback offers. The study provides valuable insights for businesses and policymakers in the digital payment industry, shedding light on consumer preferences and usage patterns.

**KEYWORDS:** Payment preferences, Mobile wallet, Payment apps, Digital Money, Usage patterns, Adoption factors, Consumer behavior

### INTRODUCTION

In today's fast-paced digital age, the way we manage our finances and conduct transactions has undergone a remarkable transformation. One of the most significant advancements in this realm is the widespread adoption of mobile wallets. Mobile wallets have revolutionized the way we make payments, manage expenses, and experience financial convenience. These digital tools have become an integral part of our daily lives, offering seamless and secure alternatives to traditional cash and card transactions.

The adoption of mobile wallets has not only simplified payment processes but has also ushered in a new era of financial inclusion and empowerment. With just a few taps on a smartphone, users can pay bills, shop online, split expenses, and even invest their money. The convenience and versatility of mobile wallets have made them a ubiquitous presence in the lives of people from all walks of life.

This research embarks on a comprehensive exploration of mobile wallet usage patterns, seeking to unravel the intricacies that govern the choices and behaviors of users. We delve into the motives behind adopting mobile wallets, examine the frequency and diversity of transactions, and assess the level of satisfaction among users. Furthermore, we scrutinize the impact of demographic factors, technological preferences, and security concerns on mobile wallet usage.



## LITERATURE REVIEW

The field of mobile payments and digital wallets has witnessed substantial growth and interest over the years, with several notable studies contributing to our understanding of this dynamic domain. These studies and observations shed light on various aspects of adoption, usage patterns, and the significance of digital wallets in the modern financial landscape.

In their 2008 paper, Pousttchi and Wiedemann explored mobile payment adoption and discovered that subjective security was not the primary driver. Instead, factors like trustworthiness and the confidentiality of payment information played a pivotal role. They identified four key variables influencing user intent and behavior.

In 2015, Ghuman and Srivastava questioned consumer preferences regarding all-in-one platforms like Paytm versus specialized sites like FreeCharge.

Prof Trilok Nath Shukla, in a 2016 paper, provided insights into mobile wallets, emphasizing their importance for marketers and digital businesses, irrespective of their market status. The Reserve Bank of India (RBI) noted in 2017 the significant impact of demonetization on the growth of digital payment platforms like Paytm and Mobikwik, signaling a shift towards digital payments in India.

Punwatkar and Verghese's 2018 study uncovered several factors influencing the adoption of digital payments. These factors include 'economic value,' 'perceived usefulness,' 'perceived security,' 'privacy,' 'know-how,' and 'intention to use.'

In their 2019 study, Jain and Sabharwal found that most transactions now occur through mobile wallet apps. Younger generations are the primary users, while factors like legal requirements, low awareness, lack of trust, and security concerns discourage usage.

Collectively, these studies and observations highlight the multifaceted nature of mobile payments, including technological, consumer behavior, and regulatory factors. They underscore the role of trust, convenience, and specialization in shaping consumer preferences and driving the growth of digital payment platforms. Moreover, the RBI's observations illustrate how policy changes can significantly influence the adoption of digital wallets in a specific market. The research landscape in mobile payments and digital wallets remains dynamic and ever-evolving.

## SIGNIFICANCE OF THE STUDY

This study holds paramount significance as it delves into the intricate landscape of mobile wallet usage, providing crucial insights into the factors influencing adoption and usage patterns. In an era characterized by the rapid proliferation of digital payment solutions, understanding why individuals embrace mobile wallets and the determinants shaping their usage behavior is of profound importance. These insights have far-reaching implications, ranging from informing business strategies and enhancing user experiences to promoting financial inclusion and shaping regulatory policies. Additionally, this research contributes to the academic understanding of mobile payments, offering valuable knowledge for both scholars and practitioners in this evolving field, with potential global applicability.

## OBJECTIVES OF THE STUDY

1. To gain insights into the motivations behind individuals' adoption of mobile wallets.
2. To determine the frequency and specific scenarios in which people utilize mobile wallets for transactions.
3. To investigate the factors that influence the adoption of mobile wallet



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## RESEARCH METHODOLOGY

**Research Design:** This research is conducted using a descriptive research design to ensure an effective and systematic investigation. The methodology comprises both primary and secondary sources of data collection.

**Primary Sources:** Primary data is gathered by conducting interviews, conversations, and utilizing structured questionnaires among mobile wallet users in the Pune region.

**Secondary Sources:** Secondary data is acquired from various secondary sources such as books, journals, and other relevant publications.

**Sampling Method:** Data collection is performed using a non-probability convenience sampling method.

**Sample Size:** The study encompasses responses from a sample size of 700 respondents.

**Scope of the Study:** This study focuses on analyzing the usage patterns of mobile wallets within the city of Pune. The data for this study was collected during the period of December 2022.

## ANALYSIS AND FINDINGS

### 1. DEMOGRAPHIC PROFILE OF THE RESPONDENTS

TABLE NO 1: DEMOGRAPHICS

Demographic Particulars	Classification	Percentage	Findings
Age(Years)	Below 20	18%	Majority of the respondents are in the group of 21 to 40
	21-30	40%	
	31-40	36%	
	41-50	6%	
	Above 50	0	
Gender	Male	72.85%	Majority of the respondents are male
	Female	27.14%	
Monthly Income	Below 20,000	7%	Majority of the respondents draw a monthly salary in the bracket of 20,000p.m to 40,000pm
	21,000-30,000	38%	
	31,000-40,000	46%	
	Above 40,000	9%	
Occupation	Student	37%	Majority of the respondents are from private services
	Home maker	35%	
	Government service	8%	
	Private service	47%	
	Business /Professionals	7%	
	Others	10.4	
Educational Qualification	SSC / HSC	20%	Majority of the respondents are graduates
	UG	53%	
	PG	27%	
	Others	0	



## 2. USAGE PATTERN

### A. CASHLESS PAYMENT MODE PREFERENCES

In the table below, we present the modes of non-cash payment as selected by respondents in our research study.

TABLE NO 2 CASHLESS PAYMENT MODE PREFERENCES

Sr no	Cashless payment mode	No of responses
1	Debit card	310
2	Credit card	530
3	Mobile wallet	700
4	UPI	560

The table presents data on the preferences for different cashless payment modes, along with the number of responses for each mode. Here's the interpretation of the data:

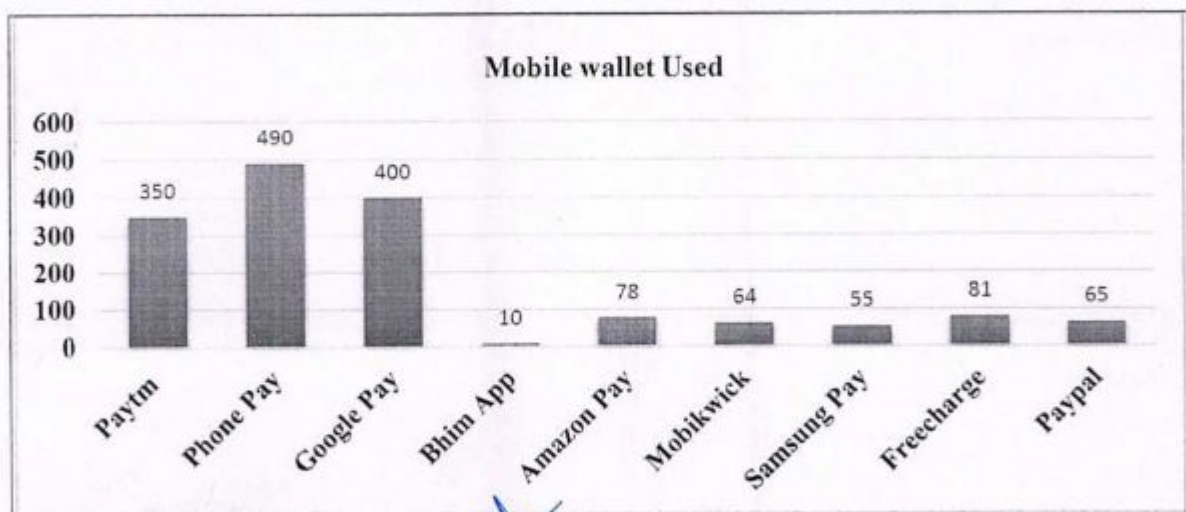
1. **Debit Card:** 310 respondents preferred using debit cards for cashless transactions.
2. **Credit Card:** Credit cards were the second most popular choice, with 530 respondents opting for this payment mode.
3. **Mobile Wallet:** Mobile wallets emerged as the most preferred cashless payment mode, with a significant 700 respondents selecting this option.
4. **UPI (Unified Payments Interface):** UPI was also a popular choice, with 560 respondents indicating a preference for this mode.

From this data, it's evident that mobile wallets are the most favored cashless payment mode among the respondents, followed by credit cards, UPI, and debit cards in descending order of preference.

### B. MOBILE WALLET PREFERENCE TRENDS AMONGST USERS: (MULTIPLE CHOICE)

In the ever-evolving landscape of digital payments, users exhibit diverse preferences for mobile wallet applications. From the familiar Paytm to the convenience of Phone Pay and the trust in Google Pay, we explore the diverse range of options embraced by users.

GRAPH NO.1: DIFFERENT MOBILE WALLET USED





These statistics provide insights into the popularity of various mobile wallets among the respondents. PhonePe appears to be the most widely used mobile wallet among the surveyed individuals, followed closely by Google Pay and Paytm. Other wallets like Amazon Pay, Freecharge, and PayPal also have a significant user base.

### C. MOBILE WALLET ADOPTION DURATIONS

**TABLE NO 3: DURATION OF MOBILE WALLET ADOPTION**

Sr no	Duration	No of responses	Percent
1	Less than one year	10	1%
2	1-2 year	230	33%
3	2-3 year	400	57%
4	More than 3years	60	9%

The usage patterns of mobile wallets among respondents reveal interesting insights. Among the participants, a significant 33% have been using mobile wallets for a duration ranging from 1 to 2 years, showcasing a growing user base. Moreover, a substantial 57% of respondents have been consistent users of mobile wallets for 2 to 3 years, highlighting its enduring appeal and utility in their lives.

### D. SOURCES OF MOBILE WALLET AWARENESS (MULTIPLE CHOICE)

The analysis of the sources of mobile wallet awareness reveals valuable insights into how users gather information about mobile wallets.

**TABLE NO 4: SOURCES OF MOBILE WALLET AWARENESS**

Sr no	Awareness	No of responses
1	Radio & Television	530
2	Friends and relatives	520
3	Newspaper, magazines	420
4	Websites	140
5	Shopping sites	200
6	Other	80

The data on awareness sources for mobile wallets reveals that respondents primarily become aware of this payment method through friends and relatives (520 respondents) and television and radio advertisements (530 respondents). Print media, such as newspapers and magazines, also contribute significantly, with 420 respondents citing them as a source. Additionally, some respondents mentioned websites (140) and shopping sites (200) as channels for discovering mobile wallets. A smaller group of respondents (80) learned about mobile wallets through various other sources, including advertising and billboards. Overall, this data highlights the diverse channels mobile wallets use to raise awareness, with personal networks and electronic media playing crucial roles.

### E. FREQUENCY OF MOBILE WALLET USAGE

Below table shows the frequency of usage of mobile wallet in a day

**TABLE NO 5: FREQUENCY OF MOBILE WALLET USAGE**

Sr no	Frequency of usage	No of responses	Percent
1	Once a day	73	10
2	2-5 times a day	190	27
3	5-10 times a day	280	40





4	More than 10 times a day	157	22
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The data presented in the table reveals the frequency of mobile wallet usage within a day. This breakdown offers valuable insights into how individuals engage with mobile wallets for their daily transactions:

Firstly, a segment of respondents (10%) falls into the category of using their mobile wallet once a day. This group likely includes individuals who rely on mobile wallets for specific daily transactions or have more infrequent usage. The most prominent group comprises those who use mobile wallets 2-5 times a day, accounting for 27% of the respondents. This indicates that a significant portion of the surveyed population leverages mobile wallets for a range of transactions throughout their daily routines. An even larger group (40%) utilizes their mobile wallets 5-10 times daily, showcasing a substantial preference for this payment method in numerous daily transactions. Furthermore, a notable 20% of respondents go beyond this and use their mobile wallets more than 10 times a day, indicating a high level of dependence on mobile wallets for various transactions throughout the day.

#### F. MOBILE WALLET USAGE PREFERENCES FOR VARIOUS TRANSACTIONS (MULTIPLE CHOICE)

In this section, we delve into the diverse transactions for which respondents prefer using mobile wallets. Participants were presented with multiple options and allowed to select all the scenarios in which they utilize mobile wallets for cashless transactions. The results reveal intriguing insights into the versatility of mobile wallets in modern-day transactions.

**TABLE NO 6: MOBILE WALLET USAGE PREFERENCES**

Sr no	Preferences	No of responses
1	Food	360
2	Movie ticket	300
3	Utility bill payment	130
4	Online shopping	330
5	Transportation	140
6	Transfer money	490
7	Books	20
8	Apparel	80

From the analysis of the graph depicting respondent preferences regarding the usage of mobile wallet apps for purchasing goods and services, several key insights emerge:

- Food:** A notable 360 respondents prefer to use mobile wallets for ordering food online, indicating the convenience and popularity of mobile wallets in the food delivery segment.
- Movie Tickets:** Movie ticket bookings are another significant use case, with 300 respondents choosing to book their movie tickets using mobile wallets, emphasizing their convenience in the entertainment sector.
- Utility Bill Payment:** A smaller segment of 130 respondents uses mobile wallets for utility bill payments, showcasing their potential for streamlining financial transactions beyond everyday shopping.
- Online Shopping:** Online shopping emerges as a popular choice, with 330 respondents utilizing mobile wallets for making purchases, underscoring their role in e-commerce transactions.



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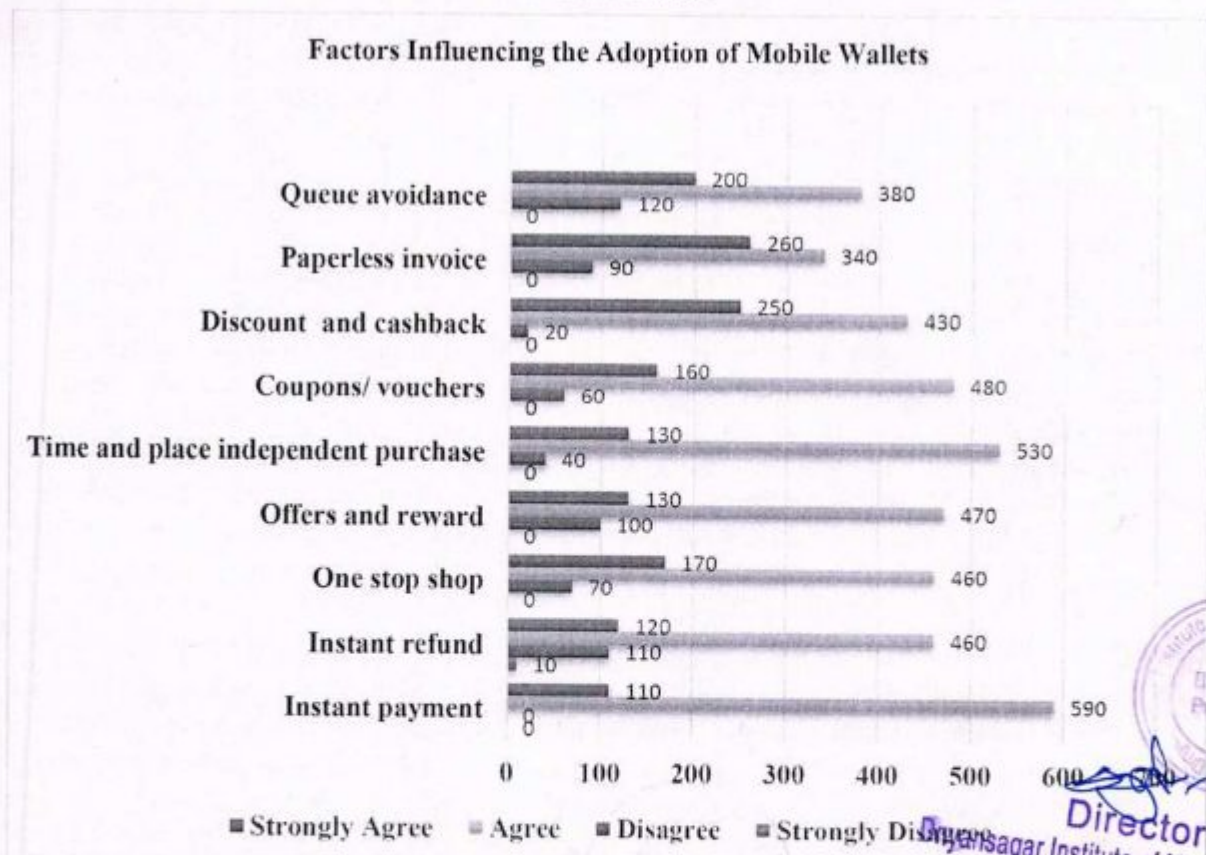
5. **Transportation:** Mobile wallets are also favored by 140 respondents for transportation-related payments, highlighting their use in the travel and commute sector.
6. **Money Transfer:** The majority of respondents, a substantial 490, utilize mobile wallets for money transfers, reflecting their role as a versatile tool for peer-to-peer transactions.
7. **Books:** While not a primary choice, a limited 20 respondents use mobile wallets for purchasing books, indicating a niche but existent interest in mobile wallet use for educational purposes.
8. **Apparel:** Similarly, mobile wallets are used by 80 respondents for purchasing apparel, suggesting their relevance in the fashion and clothing industry.

In conclusion, the analysis demonstrates that mobile wallets have found utility in various aspects of daily life, from ordering food and booking movie tickets to handling financial transactions and online shopping. This diversity in usage patterns underscores the adaptability and convenience of mobile wallet apps in catering to a wide range of consumer needs.

### 3. FACTORS INFLUENCING THE ADOPTION OF MOBILE WALLETS

The table presented below illustrates the various factors that impact the acceptance and use of mobile wallet applications. These factors have been assessed on a scale ranging from 'strongly disagree' to 'disagree,' 'agree,' and 'strongly agree.' The information is also visually depicted in the accompanying graph.

GRAPH NO.2



The analysis of factors influencing the adoption of mobile wallet is as follows:



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1. **Instant Payment:** A majority of respondents (84%) find instant payment appealing, with 70% agreeing and 14% strongly agreeing with this feature.
2. **Discounts and Cashback:** The prospect of receiving discounts and cashback is highly influential, with 68% agreeing and 10% strongly agreeing.
3. **Time and Place Independence:** Most respondents (73%) appreciate the ability to make transactions at their convenience, with 53% agreeing and 20% strongly agreeing.
4. **Coupons and Vouchers:** Overwhelmingly, 80% of respondents are in favor of coupons and vouchers, with 64% agreeing and 16% strongly agreeing.
5. **One-Stop Shop:** The idea of a one-stop shop for various transactions is well-received, as 63% agree and 17% strongly agree.
6. **Offers and Rewards:** A significant portion (60%) of respondents see offers and rewards as an attractive feature.
7. **Paperless Invoice:** While not as strong as other factors, 60% of respondents agree (34%) or strongly agree (26%) with the concept of paperless invoices.
8. **Queue Avoidance:** The convenience of avoiding queues influences 66% of respondents, with 38% agreeing and 28% strongly agreeing.
9. **Instant Refund:** A majority of respondents (58%) appreciate the idea of instant refunds, with 46% agreeing and 12% strongly agreeing.

These findings reveal that mobile wallets success in driving adoption can be attributed to its ability to offer instant transactions, attractive discounts, and cashback opportunities, along with the convenience of anytime, anywhere transactions. Additionally, the platform's provision of coupons, a one-stop shop, and offers/rewards plays a significant role in attracting users.

## CONCLUSION

This research study delved into the intricate landscape of customer usage patterns concerning mobile wallets in India. It underscores the importance of targeted outreach to diversify the user base, emphasizing the need for more inclusive adoption, particularly among women. While major players like Paytm, PhonePe, and Google Pay dominate the landscape, emerging competitors indicate space for innovation and competition. The significance of incentives, user-friendliness, and versatile application offerings becomes evident. Effective marketing strategies are pivotal to raise awareness and attract users. Moreover, mobile wallets have become an integral part of everyday financial transactions. This study serves as a compass, guiding stakeholders in this dynamic field toward sustained growth and success.

## SUGGESTION

The study's findings offer several pertinent suggestions for the mobile wallet industry:

To address the gender imbalance in mobile wallet adoption, providers should launch targeted campaigns to encourage more women to embrace this technology. The establishment of a comprehensive feedback mechanism is crucial. Gathering and analyzing customer feedback regularly can uncover areas for improvement, ensuring a more user-centric approach. Mobile wallet providers should remain vigilant about regulatory compliance. Adhering to guidelines set by the Reserve Bank of India (RBI) is essential, and if applicable, they should consider acquiring payment bank licenses. Enhancing customer support services is essential. Timely issue resolution and effective support can significantly enhance user satisfaction and trust in



mobile wallet platforms. Strategic collaborations with telecom companies are advisable to bolster network connectivity. This would result in a smoother and more uninterrupted mobile wallet service, ultimately benefiting the end user.

These suggestions, when executed effectively, have the potential to drive the growth and sustainability of mobile wallet services in the dynamic Indian market.

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## A Study of Factors that Influence the Quick Service Restaurants of Baner and Balewadi to OPT for Online Food Ordering Portals

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### ABSTRACT

**Purpose:** This study investigates the impact of online food ordering portals on Quick Service Restaurants (QSRs) in Baner and Balewadi. It aims to identify the factors that drive QSRs to adopt online food ordering services, resulting in business expansion, increased customer reach, higher profits, and improved customer loyalty. Additionally, the research explores the contribution of online food ordering portals to awareness creation and revenue generation in the QSR industry. **Methodology:** The research employed a descriptive research design to analyse the QSR landscape in Baner and Balewadi. Secondary information from books and online sources provided insights into online food ordering trends. Primary data was collected through a survey of 52 QSRs using convenience sampling. Questionnaires were administered to QSR owners or managers, and data analysis involved counting, comparing, and presenting the findings using Microsoft Excel. **Findings:** The study revealed that partnering with online food ordering portals had a significant positive impact on QSRs in Baner and Balewadi. It resulted in increased sales and revenue growth, driven by the expanded customer reach and convenience offered by these platforms. QSRs also experienced improved customer attraction and retention, contributing to enhanced business prospects. **Implications:** The findings emphasize the significance of online food ordering portals for QSRs, enabling them to expand their reach, boost sales, and cultivate customer loyalty. Partnerships with online portals offer QSRs valuable opportunities to enhance their business prospects. The insights from this study can assist QSRs in making informed decisions regarding marketing strategies and establishing a strong online presence.

**Keywords:** Online food ordering portals, Quick service restaurants (QSRs), Influence, Business expansion, Customer loyalty.

**JEL Classifications:** L83 & 87



### INTRODUCTION:

The fast food industry, particularly quick service restaurants (QSRs), has witnessed a significant shift towards online ordering platforms. This trend is driven by the growing preference of consumers, especially millennials, to order food online. Studies indicate that 40 percent of consumers prefer online ordering, leading to a 26 percent increase in spending. The India online food delivery market size reached US\$ 28.4 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 118.2 Billion by 2028, exhibiting a growth rate (CAGR) of 27.8% during 2023-2028.

Online food ordering platforms, such as Swiggy, Zomato, UberEats and Foodpanda, have experienced remarkable growth in the number of daily orders. To optimize their services, these platforms have started investing in in-sourcing deliveries, leading to a significant increase in self-deliveries. This shift has allowed them to reduce the average delivery time, ultimately enhancing customer satisfaction and encouraging repeat orders. Restaurants recognize the need for a seamless and consistent approach to enhance their operations and increase sales. Online food ordering portals have been developed by experienced professionals to serve both restaurants and customers conveniently. These platforms offer tailored websites and applications for restaurants to manage online food sales, order processing, and delivery. Users can easily search and filter restaurants based on their location, placing orders with the most suitable options. Leading players in the market, such as Swiggy and Zomato, have chosen to handle deliveries in-house to ensure better control and efficiency. Their focus on in-house deliveries has allowed them to maintain full control over the delivery process and guarantee customer satisfaction.



The preference for online food ordering is driven by several factors, including instant gratification, order accuracy, price transparency, elimination of language barriers, and the convenience of saved payment information. Consumers appreciate the ability to browse menus, select items, and place orders at their convenience without the need for waiting or language communication barriers.

In conclusion, the influence of online food ordering portals on QSRs has transformed the fast food industry. With the growing demand for convenience and the advantages offered by online ordering, the industry is expected to continue its upward trajectory. QSRs and online food ordering platforms are capitalizing on this trend to enhance customer experiences, increase revenues, and shape the future of food delivery services.

#### **NEED FOR THE STUDY:**

The dynamic nature of the food service industry necessitates a deeper understanding of the factors driving Quick Service Restaurants (QSRs) in Baner and Balewadi to adopt online food ordering platforms. With a growing number of customers embracing the convenience of online ordering, it is crucial to investigate the reasons behind QSRs' adoption of these platforms. This research paper aims to examine and analyse the key factors that influence QSRs in Baner and Balewadi to integrate online food ordering portals into their operations. By identifying these factors, QSRs can make informed decisions to effectively cater to the evolving preferences of their customers and enhance their competitive edge in the market.

#### **OBJECTIVES OF THE STUDY:**

The objectives of the study are-

1. To gain a comprehensive understanding of online food ordering portals and quick service restaurant
2. To examine the factors that influence restaurants in the Baner and Balewadi areas to adopt online food ordering portals, identifying the drivers behind their decision-making process

#### **SCOPE OF THE STUDY:**

The study encompassed a total of 52 QSRs located in the Baner and Balewadi areas. Convenience sampling, a non-probability sampling method, was utilized to select the participating QSRs. This method allowed for a convenient selection of restaurants that were easily accessible and willing to participate in the study. The findings derived from this sample are intended to provide insights into the factors influencing QSRs in this specific region.

#### **LITERATURE REVIEW:**

(Mukherjee, 2022) examines the impact of food delivery start-ups like Zomato and Swiggy on the restaurant industry, analyzing the strategies of popular food delivery apps, and understanding the factors influencing consumers' choice of online food delivery services. The findings highlight the importance of online ordering software and maintaining a strong online presence for effective food delivery operations.

(John, 2021) provides a comprehensive evaluation of the impact of the COVID-19 pandemic on the food services sector in India, using secondary data from credible sources. The findings suggest that digitally-driven formats such as cloud kitchens and delivery aggregators are poised to dominate the industry in the long term. Although the study relies solely on secondary data, future research should incorporate consumer responses to better understand post-pandemic dining habits. The study highlights the transformative effects of the pandemic on food service consumption and emphasizes the need to study the evolving landscape facilitated by digital technologies. Overall, it offers valuable insights and generates potential research questions in the realm of food services in the context of the pandemic.

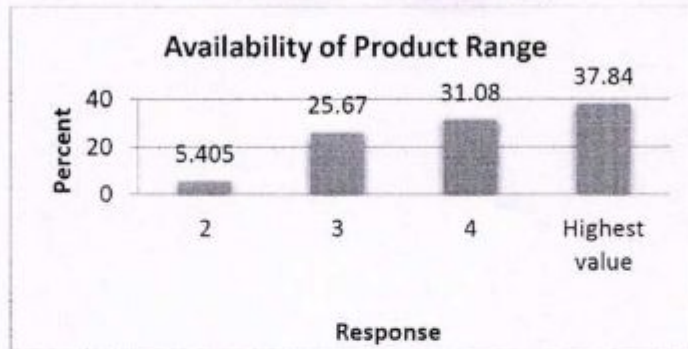
(Mrs.R.Saranya & Dr.T.Sreerekha, 2021) the study showcases the increasing popularity of online food ordering systems, with 96% of respondents utilizing this convenient option. Swiggy is the preferred choice for 58% of participants due to its extensive market presence. Factors such as faster delivery and discounts play a crucial role in influencing customer decisions. The study emphasizes the significance of a user-friendly online food ordering system to enhance the overall customer experience. Overall, the findings highlight the widespread adoption of online food delivery platforms, with Swiggy emerging as the preferred app among the selected options.

(Gupta, 2019) explores the benefits, as well as the positive and negative effects, of electronic food delivery and various online food delivery applications. Additionally, the research delves into the strategies employed and understanding the impact of food delivery apps, with specific emphasis on Zomato and Swiggy on the restaurant business. The findings of this study will contribute to our understanding of how these platforms have reshaped the industry and their influence on restaurant operations.

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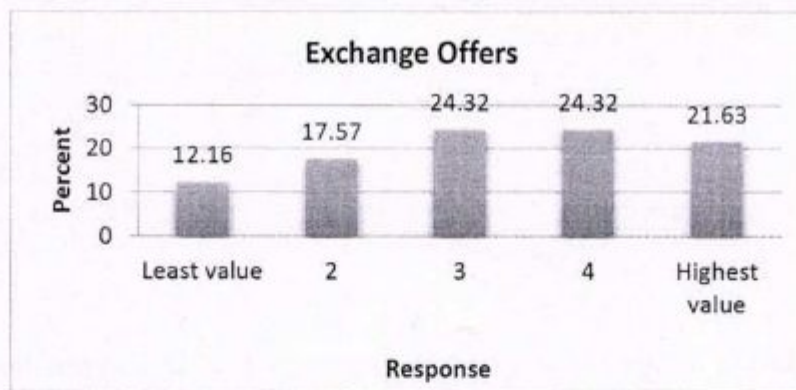


**Figure 6: Rating by the Manager regarding Availability of Product range at the dealership**

The significance of having a wide range of products available at dealerships is evident from the data presented in the table above. Among the 74 dealers surveyed, a substantial 68.9% have rated the availability of a diverse product range as a high-priority factor. This underscores the critical role that product range plays in the overall success of two-wheeler dealerships. A comprehensive product range not only attracts potential buyers but also fosters customer satisfaction and loyalty.

### G. EXCHANGE OFFERS

'Exchange offers' represent a prevalent sales promotion strategy, particularly in the two-wheeler industry, offering buyers the chance to receive value for their old two-wheelers. This promotional approach serves as a highly effective means to draw in both new and returning customers, effectively boosting sales. Dealerships frequently employ this practice, facilitated by the manufacturer, to enhance customer engagement by providing an opportunity to upgrade to a newer model.



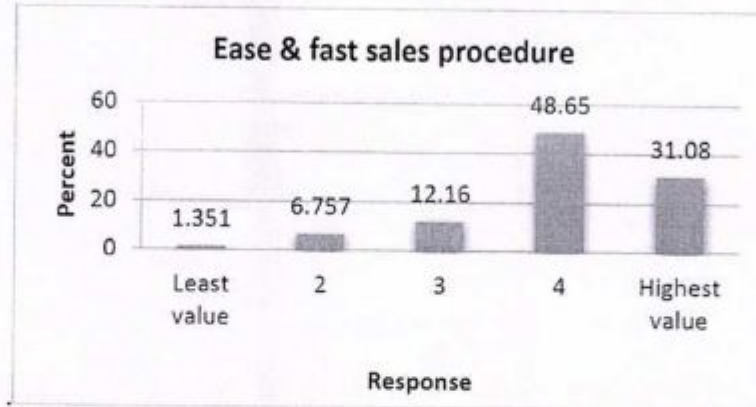
**Figure 7: Rating by the Manager regarding Exchange offer' at the dealership**

The data depicted above shows that approximately 45.9% of the dealers view exchange offers as a factor of importance in their operations. Nevertheless, it is noteworthy that the impact of exchange offers does not rank as high as other factors such as store layout, interior design, location, product range, and the presence of knowledgeable and supportive sales staff.

### H. EASE AND FAST SALES PROCEDURE

In the realm of sales, identifying the buyer, understanding their preferences, and determining how the dealer can fulfill those desires is essential. When crafting their sales procedures, dealers place significant emphasis on streamlining and simplifying this process.



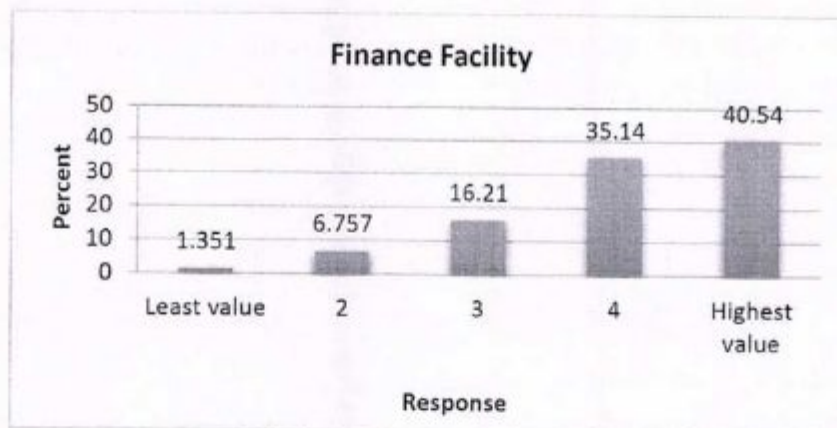


**Figure 8: Rating by the Manager regarding ease and fast sales procedure at the dealership**

The data provided above highlights the significance of ease and a fast sales procedure in the eyes of dealers, with a substantial 79.6% of them acknowledging its importance. This emphasis on efficiency is primarily driven by the busy schedules of customers who seek a swift and responsive sales service.

### I. FINANCE FACILITY

The dealer maintains affiliations with multiple finance partners, including banks and financial institutions. This collaborative approach offers customers a diverse range of financing options, enabling them to select a financial partner that aligns with their unique requirements and financial profiles.



**Figure 9: Rating by the Manager regarding finance facility at the dealership**

The data provided above highlights that 75.6% of dealers accorded great significance to the availability of finance facilities when formulating their sales strategies. To cater to their customers' financial needs in acquiring two-wheelers, dealers extend loan and financing services through their associated financial institutions. This finance facility enhances the purchasing capability of customers, acting as an incentive for them to invest in a two-wheeler, ultimately driving increased sales for the dealers.

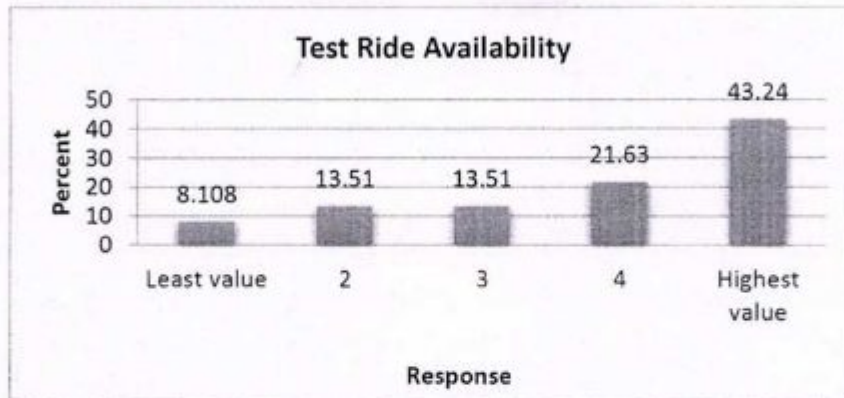
### J. TEST RIDE FACILITY

In today's fast-paced world, customers are increasingly looking for a hands-on experience before making a purchase decision. Providing a test ride facility enables potential buyers to feel the performance, comfort, and handling of a two-wheeler firsthand. It's a game-changer for dealers as it converts curious onlookers into satisfied customers.

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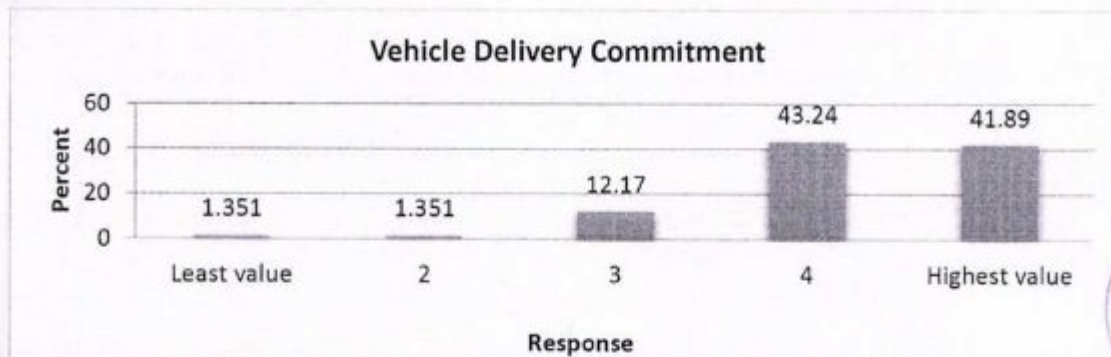


**Figure 10: Rating by the Manager regarding test ride facility at the dealership**

According to the data, 64.8% of dealers consider the test ride facility to be an important factor in their sales activities. The concept behind offering test rides is that it enables customers to spend time with the product, which, in turn, helps them better understand how it would feel to own it. This extended interaction can lead to a stronger connection between the customer and the product or service. It allows customers to form a more vivid mental picture of themselves as owners, increasing the likelihood of a successful sale.

### K. VEHICLE DELIVERY COMMITMENT

"Vehicle delivery commitment" refers to a promise or assurance made by a seller or dealership to deliver a vehicle to the customer within a specified timeframe or under specific conditions. In the realm of two-wheeler dealerships, the concept of a "vehicle delivery commitment" holds paramount importance.



**Figure 11: Evaluation of Vehicle Delivery Commitment by the Dealership**

The data clearly underscores the significance of "vehicle delivery commitment" in the eyes of dealers, with a substantial majority of 63 dealers (85.1%) placing a high value on this aspect. This demonstrates that dealers recognize the crucial role of the sales experience, particularly concerning the commitments made during the delivery process and the adherence to delivery timing. This, in turn, is closely linked to the ultimate goal of achieving customer satisfaction.

### FINDINGS

- Diverse Dealer Representation:** The study encompasses a diverse range of two-wheeler companies, with Honda, TVS, and Hero MotoCorp being the leading brands among the dealers.
- Impact of Physical Environment:** The layout, interior, and location of the dealership are critical factors in shaping the sales process, as rated by a significant majority of dealers.





3. **Product Display and Range:** Effective product display and a wide range of products are highly valued by dealers, underscoring their importance for dealership success.
4. **Discount Offers and Sales Staff:** Attractive discount offers and the presence of a helpful, courteous, and well-trained sales staff play significant roles in the sales process.
5. **Finance Facilities and Efficiency:** Availability of finance facilities and a swift, efficient sales procedure are key considerations for dealers when formulating their sales strategies.
6. **Test Ride Facility and Vehicle Delivery Commitment:** Dealers acknowledge the importance of providing a test ride facility, with a majority rating it as an important factor. Furthermore, a substantial majority of dealers place a high value on "vehicle delivery commitment."

### SCOPE FOR FURTHER RESEARCH:

The scope for further research in the context of two-wheeler dealerships includes:

1. **Consumer Perceptions and Dealer Practices:** Investigate how dealer-rated factors such as layout, interior, location, and sales staff align with actual consumer perceptions and preferences to gauge their impact on customer satisfaction.
2. **Technology Integration:** Explore the role of technology in the sales process, particularly in an increasingly digital world. Examine how digital platforms, virtual test rides, and customer service tools impact dealership strategies and customer satisfaction.
3. **Market Trends and Dealer Strategies:** Analyze the evolving market trends, especially in the context of emerging technologies and environmental concerns, and assess how dealerships are adapting their strategies to meet changing customer demands in areas such as electric two-wheelers.

These areas of research would provide valuable insights into how dealerships can enhance customer satisfaction and optimize their sales strategies in response to evolving market dynamics and technological advancements.

### CONCLUSION

The study explores two-wheeler dealerships in Pune, with a focus on key manufacturers like Honda, TVS, and Hero MotoCorp. The dealership's physical environment significantly impacts the sales process, highlighting the importance of layout, interior design, and location.

Effective product presentation, a wide product range, discounts, and a skilled sales staff are critical for dealership success. Finance facilities and an efficient sales process are key in meeting modern customer expectations. The availability of a test ride facility and commitment to vehicle delivery also enhance customer satisfaction.

Our study offers a comprehensive understanding of dealership considerations, shedding light on the complex interplay of elements shaping customer experiences. These insights are invaluable for dealerships seeking success in the competitive two-wheeler market, meeting customer expectations effectively.

### LIMITATIONS

A few key limitations related to the research on two-wheeler dealerships:

1. **Sample Size and Diversity:** The study may have limitations related to the size and diversity of the sample. A larger and more diverse sample could provide more comprehensive insights and reduce the potential for sampling bias.





2. **Geographical Scope:** The findings are specific to Pune city and may not be directly applicable to other regions with differing market dynamics. The study's limitations in terms of geographical coverage may restrict its generalizability to a broader context.
3. **Temporal Factors:** The study's findings may not account for dynamic market changes that could have occurred after the data collection period. Market dynamics, consumer preferences, and dealership strategies can evolve rapidly, and these changes may not be reflected in the study's findings.

These limitations should be considered when interpreting the results and applying them to real-world dealership strategies, recognizing the need for further research to address these constraints.

## SUGGESTIONS

Based on the study's findings, dealerships should consider the following suggestions:

1. **Enhance the Physical Environment:** Invest in creating an appealing dealership layout, interior, and choose strategic locations to positively influence customer perceptions.
2. **Effective Product Display:** Improve product display methods to attract potential customers, making the dealership a more inviting and enticing space.
3. **Discount Strategies:** Implement attractive discount offers to incentivize purchases and gain a competitive edge in the market.
4. **Sales Staff Training:** Ensure sales staff is well-trained, courteous, and helpful, as their performance directly impacts the customer experience and overall sales success.
5. **Finance Options:** Explore and expand finance facilities to cater to a broader range of customers and make the purchasing process more accessible.
6. **Efficiency and Test Rides:** Streamline the sales process for efficiency to meet the demands of time-conscious customers. Additionally, continue to prioritize the provision of test ride facilities to allow customers to experience products firsthand, increasing the likelihood of sales.
7. **Maintain Delivery Commitments:** Continue to prioritize and honor vehicle delivery commitments, as this is a key factor in customer satisfaction and long-term success.

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## A STUDY OF BURNOUT SYNDROME AMONGST HOSPITAL STAFF DURING COVID PANDEMIC IN PUNE DISTRICT

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### ABSTRACT

Hospital employees have experienced a higher rate of burnout in the COVID 19 epidemic phase, which is caused by the job's demands and capacity to meet them, organizational structure, relationships with coworkers, and work-life balance. "Burnout" is characterized as a condition of "physical", "emotional", and "mental tiredness" in hospital employees that is brought on by demanding circumstances that cannot be managed by satisfied competency, which is a serious issue. To determine the frequency of burnout amongst the hospital personnel working in those private hospitals in the Pune District, a descriptive research using a questionnaire is conducted.

The "Copenhagen Burnout Inventory" (CBI) was being used in this study to assess burnout amongst hospital workers during the COVID-19 epidemic at the private hospitals in the Pune area. Personal, professional & client-related (i.e. pandemic related) areas of "Burnout" were evaluated.

The personnel of Pune's private hospitals served as the study's target group. Just 2000 of the almost 3000 hospital staff members from private multispecialty hospitals with 100 to 500 beds submitted the questionnaires. Burnout cannot be completely removed from the workplace, but if its causes are identified, it may be more effectively controlled and lessened.

**Keywords:** Copenhagen Burnout Inventory, COVID Pandemic, Mental health, Burnout.

### Introduction

The growing disconnect between the individual and the responsibilities of the profession leads to burnout. Working as a hospital professional in an intricate organizational framework is unavoidably taxing and stressful. Staff well-being, patient safety, and the health organizations whole are all negatively impacted by burnout. By examining the causes of burnout and what can be done to manage and avoid it among the workforce, this study's primary goal was to determine the prevalence of burnout among hospital employees, including physicians, nurses, paramedics, administrative, and support workers. Then, we give analysis of few research studies that has been done to address the problem i.e. burnout in health professionals.

Progressive emotional, mental, and physical depletion is what is meant by burnout. Burnout syndrome is a psychological condition brought on by long-term exposure to pressures from the workplace. The burnout continuum has three main characteristics that are negatively impacted as it advances: emotional exhaustion (referring to feelings of being overworked emotionally), depersonalization (referring to an impersonal response to clients), and personal accomplishment (standing for feeling of the competence and success in the work that people do themselves).

Due to lockdown, contact with affected patients, forced deployment to COVID isolation units, inadequate training, fear of quarantine, particularly among staff who had infected family members or children at home, as well as due to societal stigma against hospital staff, the hospital staffs were put in physically, emotionally, and mentally taxing situations during the pandemic. Many COVID outbreaks that have happened over the previous 20 years have had a significant negative psychological impact on hospital employees, including psychological anguish and posttraumatic stress. Burnout is widely acknowledged these days as a serious issue that affect the hospital staff members' physical and emotional health.

Those that are burned out do make poor judgments, medical errors occur often, act aggressively and get distressed against patients, and have tense working environment and interrelationships. Burnout also raises the risk of melancholy, anxiety, insomnia, exhaustion, alcohol and drug abuse, marital issues, voluntarily retirement, and even suicides.

A common issue among practically all hospital employees is burnout. These research and others show how common burnout is in the healthcare industry. Burnout has a detrimental effect on a person's performance

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(Maslach C, 2001). This is important information for hospital employees since it directly jeopardizes the health and life of patients and violates the staff code of conduct.

Freudenberger D. and Maslach C. initially identified burnout as a condition of "emotional tiredness" amongst the professionals in mid of the 1970s. Burnout syndrome is a psychological condition brought on by long-term exposure to pressures from the workplace. It has three main characteristics, all of which are negatively impacted as the burnout continuum advances: emotional exhaustion (referring to the sensation of being overworked emotionally), depersonalization (referring to an impersonal response to clients), and personal accomplishment (referring to the perceptiveness of competence and accomplishment in doing work related to people).

The impacts of psychological strain on hospital workers have not been sufficiently mitigated by healthcare organization administrators' actions or policies.

The "World Health Organization (WHO)" has published a paper on psychological consideration during COVID-19 in order to explicitly acknowledge this danger.

"Maslach Burnout Inventory (MBI)" (Maslach C, Jackson S, 1981) was initially introduced by Maslach C and Jackson S in 1981. Three factors such as emotional weariness presence, de-personalization, and a lacking of personal fulfillment are used by the MBI to define burnout. Using several reasons, Kristensen T, questioned the validity of the MBI. To address these concerns, he established the Copenhagen Burnout Inventory (CBI).

Studies from other countries have examined the effects of social wellbeing and support on psychological healthiness using "Structural Equation Model (SEM)". These studies revealed signs of depression, anxiety, sleeplessness, and discomfort.

We performed this questionnaire based survey by means of the CBI to evaluate the occurrence of burnout amongst the hospital workers of Pune area who are responsible for caring for COVID-19 patients because there were less research analyzing the psychological health state and dominance of burnout in this population.

### Literature Review

According to the definition of burnout, it is "a multidimensional construct made up of Emotional Exhaustion, Depersonalization & Diminished Personal Accomplishment that develops among persons who undertake 'people's work' of any sort" (Maslach,1982). Maslach claims that burnout is a final response to ongoing work-related pressures that emerges in three dimensions: cynicism, ineffectiveness, and tiredness (Maslach, 1997). This suggests burnout is characterized by variety of elements and not just one specific symptom, therefore having a difficult day at office or work or a terrible day doesn't always mean that someone is experiencing burnout. When there is a mismatch between the sort of work being done and the type of person doing it, burnout is unavoidable.

There are three distinct phases in the development of burnout research. A number of "theories" regarding burnout's causes were put forth during the first stage, which spanned the 1970s through the middle of the 1980s. These elements included interpersonal factors (e.g., an imbalance between customer needs and employees' resources), individual (e.g., over-commitment, unreal job expectations), emotionally drained labour outcomes (e.g., qualitative and quantitative emotional work), and organizational reasons (e.g., lack of control and support along with quantitative job demands).

History of the Burnout related research's second phase covered the years from the middle of the 1980s and the end of the 1990s. Almost a thousand researches on burnout were undertaken during this time. Nevertheless, because most of the studies had a cross-sectional design, causal inference was not possible. In a meta-analysis of this research, significant degrees of burnout were linked to emotional work mixed with organizational issues (Zapf, 2002).

The third stage had shown increase in number of longitudinal research studies from the late 1990s to the present. 38 longitudinal research studies were discovered in the literature searches done for the publications in the given thesis. Only 13 of these studies included a special focus on risk factors for burnout, participants from many occupational groups (thus varying the exposure), and follow-up periods more than one year, or response rates about 50%. These research' key conclusions were that emotional weariness is predicted by a heavy workload, a high degree of the emotional demand and difference between job expectations, control, and support.

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Burnout was defined in a variety of the ways by different authors, including Aronson (1988), Burke, Richardsen M,(1993), and Stalker, Harvey (2002). However, most of the researchers prefer the multidimensional definition developed by Maslach and colleagues (1993; 1996), which includes three dimensions: "emotional exhaustion", "depersonalization" and decreased "personal accomplishment". "Emotional Exhaustion is a dimension that describes how you feel spent, overworked, and exhausted." "Feelings of being emotionally overextended" (Klusmann U, 2021) are reflected in emotional tiredness. "Depersonalization" often known as cynicism, is a person's unfavourable and cynical sentiments regarding their business or work in general. An "impersonal approach towards beneficiaries of one's service" is referred to as depersonalization. Personally successful (feelings of personal achievement in job). "Feelings of the competency and effective performance in one's people's work" is the definition of personal accomplishment.

The author's approach of investigation is literature review. A collection of academic intellectual publications, including conference proceedings, book, journal articles and dissertations, is referred to as "literary." A continually expanding web of related scholarly works is made up in part by literature reviews. Knowledge cannot grow without evaluating current information; hence a thorough literature review builds on previously completed research studies, articles and journal study on a related subject. The definition of a literature review, according to Wilkinson 2000, includes six concepts: "list, survey, search, knowledge enhancer, report, and a supporting or guiding tool" (Wilkinson D, Aveyard H, 2010).

Our review is distinctive which emphasizes on problems that are totally associated with burnout, a thorough review of the literature, and new research strategies for remediating the burnout. Throughout the paper, we try to identify areas that are important for additional research before making final conclusions.

The pandemic has increased the demand for high-quality patient care, safety, and treatment, wherein in addition to medical supplies, a system of emotional and psychological support is also required for the patient's and the staff's wellness.

Depersonalization may result in poor patient relations that put patients' safety in danger and cause burnout in the staff members caring for that patient. Although the goal of the hospital is to give patients with high quality care and exceptional treatment services, staffs that are burnt out are more prone to make mistakes and provide subpar care.

Burnout can arise for a number of reasons, including inadequate pay, job unhappiness, bad working relationships, a heavy workload, the perception that management does not value one's contributions, neglecting personal interests in favour of family obligations, etc.

Lack of input and collaboration from hospital administration, its employees, patients, and patient family may lead to high levels of burnout since you won't feel that the task you have to perform is closely related to what you want to accomplish.

Burnout syndrome, which is becoming more common among hospital and healthcare workers, has come under scrutiny recently as a possible danger to patient safety and the quality of medical care. Hospital employees frequently experience burnout. Effective methods are required to stop and reverse staff and hospital burnout. The majority of comments have emphasized the need for medical professionals to take better care of themselves, develop more resilience, and manage pressures on their own.

Due to the high levels of stress in this service-oriented industry, hospital staff members are particularly vulnerable to burnout. It is critical that hospital professionals are capable of managing the workload pressure and giving 100% effort in emergency or non-emergency situations without compromising their physical, emotional, or mental health. This is due to the growing number of patients and their interactions with the hospital staff. With the current national conversation around COVID-19 and the medical staff caring for these patients, the long-repressed challenges of hospital workers dealing with mental health difficulties such as sadness, anxiety, and physical tiredness are suddenly front and centre. The research is now being conducted to find out how often burnout is among hospital workers.

### Objectives

1. To assess the contributing elements and gauge the extent of burnout among hospital workers.
2. To track how burnout affects staff performance at work in the hospital.
3. To research how burnout affects hospital staff's mental health there.

### Hypothesis

Ho: During COVID-19, certain staff members experience a low prevalence of burnout.

H1: Burnout is a common occurrence among staff members of multispecialty hospitals during COVID-19.





- Ho: Burnout and employees' performance at work are unrelated.  
 H2: Staff performance at work and burnout are significantly correlated.  
 Ho: Shorter-term exposure to burnout may not cause mental dangers.  
 H3: Longer-term burnout exposure may have negative mental effects.

**Research Methodology**

The lifestyle is changing in proportion to the population growth. Lifestyle is linked to both personal and professional life; therefore it makes sense that Pune is becoming the biggest city in terms of population. Indirectly to indicate that there are more individuals, each with unique opinions and ideas. Pune District Multispecialty Hospitals would be the site of research to obtain the necessary analyses. This cross-sectional descriptive study explores the association between the prevalence of burnout and job performance using qualitative and quantitative analysis.

To gauge the occurrence of burnout condition during the COVID pandemic, we had conducted cross-sectional online survey. We gathered information on gender, age, and work profile. The 31-question survey was created using Google Forms and sent to the whole hospital staff via emails and WhatsApp. We included every member of the hospital personnel, including physicians, nurses, paramedics, pharmacists, dieticians, and physiotherapists, as well as support employees like ward boys, sweepers, and attendants. Two participation requests were received, one week apart.

Three areas of burnout-related specialized questions were included in the questionnaire's five general questions. The general inquiries concerned the working environment, age, gender, and job profile. Five items in domain 1 were based on the personal burnout (i.e. without any specific attribution). The third domain was based on client-related or patient related burnout and comprised 13 items (seen as relevant to the persons' work with patient i.e. COVID pandemic). The second domain contained six items based on work related burnout (considered to be in relation with person's employment).

The Likert scale contained five response categories for each of the items ranged from "a very high degree" to "a very low degree," while additional options ranged from "always" to "never or practically never" for frequency. Each scale had a range of 0 to 100, with a greater score indicating a higher amount of the burnout. Burnout was determined as a CBI score greater than 50, which was the average of the results. CBI is straightforward, thorough, trustworthy, self-explanatory, and simple to comprehend. To gauge HCW burnout, it has strong psychometric qualities. It is free to use, has elements that address the physical and mental effects of tiredness, and contains a mix of positive and negative statements.

**Data Analysis**

Google forms were used to collect the data, which was then analyzed using IBM SPSS 26. Variables were measured using a "nominal scale" and summed through percentages (%). Mean scores (mean SD) in the personal, work-related, and pandemic related categories were calculated using a 0-to-100-point scale. Also, the replies (n, %) and average scores were computed independently for every topic. Respondents with a mean score of >50 reported burnout. ANOVA was used to determine the burnout ratings in each domain, then Tukey's multiple comparison testing. In order to analyze categorical variables, Pearson's 2 test was utilized.

In order to determine whether there is any correlation between demographic characteristics and personal, professional, and client-related (pandemic-related) burnout, a univariate analysis was conducted (OR). Given that there were only four independent variables, binary regression analysis

was not performed; For each category of burnout, only two of them on a univariate analysis were significant. P value of 0.05 was defined as statistical significance.

<i>Variables</i>	<i>Frequency (%)</i>
Age in years	
21-30	374 (18.7)
31-40	779 (38.9)
41-50	473 (23.7)
51-60	250 (12.5)
>61	124(6.2)





Staff Job profiles	
Doctors	1,661 (83.5)
Nurses	193 (9.6)
Administrative Staffs	85 (4.2)
Paramedical Staffs	38 (1.9)
Support Staffs (Sweepers, Wardboy, etc.)	23 (1.15)
Work Environments	
High risk areas(ICU, CCU, ER, Wards, OT)	1,723 (86.15)
Low risk areas	277 (13.85)

Table 1: Participants' ages, job descriptions, and places of employment (n = 2,000)

All of the 2000 hospital employees who responded to the survey were over the age of 21, and 1,626 of them (81.3%) were between the ages of 31 and 40. Doctors made up the majority of responders (1661, or 83.5%). The majority of respondents (1723, 86.15%) were employed in high-risk regions. Almost all respondents (1975, 98.75%) believed mental healthiness was equally essential to physical healthiness (Table 1).

Questions	Very high degree /Always	high degree /often	Sometimes	Low degree/seldom	Very low degree /Never	Mean score
How frequently you think that "I cannot take it anymore?"	85 (4.4%)	295 (14.8%)	932 (46.2%)	493 (24.6%)	195(9.9%)	44.82 ± 24.06
How frequently do you feel extremely tired or worn out??	67(3.6%)	329 (16.5%)	942 (46.7%)	520(25.9%)	142 (7.3%)	45.77 ± 22.78
How often you are emotionally stressed out or exhausted?	163 (8.3%)	584 (29.1%)	943 (46.8%)	231 (11.6%)	79 (4.2%)	56.40 ± 22.93
How often you are tired physically?	157 (8.0%)	593 (29.5%)	997(49.5%)	189 (9.6%)	64 (3.2%)	57.26 ± 21.87
How frequently do you feel you susceptible to illness being weak?	65 (3.5%)	294(14.8%)	943 (46.8%)	518 (25.8%)	180 (9.2%)	44.37 ± 23.19
Average Score						49.72 ± 18.68

Table 2: Distribution of Responses received against Personal burnout (n = 2,000)

Questions	Always or to a very high degree	Often or to a high degree	Sometimes or somewhat	Seldom or to a low degree	Never or to a very low degree	Mean score
Do you feel fatigued in morning thinking of the day at work?	86 (4.5%)	227 (11.5%)	811 (40.3%)	477 (23.8%)	399 (20.0%)	39.17 ± 26.74
Do you often get the feeling that it's very tiring to work at every moment in office?	75 (3.9%)	209 (10.6%)	711 (35.3%)	585(29.1%)	420 (21.0%)	36.82 ± 26.44
Do you have enough enthusiasm and energy for social wellbeing w.r.t family and friends?	431 (21.5%)	652 (32.4%)	665 (33.1%)	196 (9.9%)	56 (3.1%)	35.14 ± 25.67
Do you often feel that your job is very draining emotionally?	142 (7.3%)	493 (24.6%)	839 (41.7%)	327 (16.4%)	199 (10.1%)	50.62 ± 26.27
Does your work make you tired & frustrate?	70 (3.7%)	237 (11.9%)	760 (37.8%)	443 (22.1%)	490 (24.5%)	37.07 ± 27.40
Do you feel burnt out completely because of your physically and	96 (5.0%)	263 (13.2%)	767 (38.1%)	454(22.5%)	443 (22.2%)	39.34 ± 27.97



mentally?						
Average Score						39.69 ± 20.43

Table 3: Distribution of Responses received against Work related burnout (n = 2,000)

According to table 2, 3 and 4, the mean scores (SD) for the pandemic-related, personal, and work related burnout domains were shown 49.72 (18.68), 39.69 (20.43), and 51.37 (15.12), respectively. In comparison to work related burnout, personal burnout, the mean pandemic-related burnout score was substantially greater. One-fifth of respondents (435, 21.75%) indicated concern about dying while at work, and almost half (1094, 54.7%) showed concern about acquiring COVID-19 infection. Respondents (1331, 66.5%) also expressed concern about bringing the illness home. 514 respondents, or 25.7%, said they didn't feel accepted in their neighborhood.

Questions	Very high degree/Always	High degree/Often	Sometimes	Low degree/Seldom	Very low degree/Never	Mean score
Do you feel it's productive and fruitful while doing your task /work during the current covid situation?	269 (13.3%)	583 (28.8%)	774 (38.2%)	279 (13.8%)	121 (6.0%)	42.60 ± 26.32
Do you think that your patience is tested while working in the current covid situation?	526 (26.0%)	673 (33.2%)	628 (31.0%)	135 (6.7%)	64 (3.2%)	68.04 ± 25.53
Do you think that you are giving more than what you receive in current working condition?	563 (27.8%)	587 (29.0%)	581 (28.7%)	170 (8.4%)	125 (6.2%)	65.96 ± 28.78
Does it trench your energy /liveliness to work during the current situation of pandemic?	287 (14.2%)	654 (32.3%)	657 (32.4%)	274 (13.5%)	148 (7.6%)	57.97 ± 27.70
Do you get unhappy and hesitated to work in this pandemic situation?	232 (11.5%)	342 (16.9%)	791 (39.0%)	381 (18.8%)	280 (13.8%)	48.33 ± 29.20
Do you get depressed and anxiety in current situation of pandemic?	154 (7.6%)	308 (15.2%)	818 (40.4%)	346 (17.1%)	400 (19.7%)	43.46 ± 29.03
Do you feel you are stressed out because if lockdown?	284 (14.0%)	438 (21.6%)	770 (38.0%)	266 (13.1%)	268 (13.2%)	52.52 ± 29.87
Do you often feel it is difficult to work in the current situation?	327 (16.1%)	618 (30.5%)	716 (35.3%)	224 (11.1%)	141+26 (7.0%)	59.45 ± 27.35
Do you get scared of catching COVID infection during work in the current situation of pandemic?	613 (30.3%)	507 (25.0%)	615 (30.4%)	180(8.9%)	111 (5.5%)	66.42 ± 28.91
Do you feel that you are being helped and supported by co-workers during this situation?	535 (26.4%)	616 (30.4%)	626 (30.9%)	174 (8.6%)	75 (3.7%)	33.19 ± 26.73
Are you indulging yourself in abusive substance such as alcohol, smoke or drugs during the period of lockdown?	43 (2.1%)	65 (3.2%)	446 (22.0%)	261 (12.9%)	1,211 (59.8%)	18.76 ± 25.92
Average score						51.37 ± 15.12

Table 4: Distribution of Responses received against Pandemic related burnout (n = 2,000)

Variables	Personal Burnout, (n = 877) (43.85)			Work/Job Related Burnout, (n = 518) (25.9)			Pandemic Related Burnout, (n = 1043) (52.15)		
	n(%)	[CI 95%]	P value	n(%)	[CI 95%]	P value	n(%)	[CI 95%]	p value
Age in years									
21 – 30	199 (22.6)	Director (Ref.)		120 (23.1)	1 (Ref.)		184 (17.64)	1 (Ref.)	
31 – 40	370 (42.1)	0.79 [0.62–1.02]	0.07	236 (45.5)	0.91 [0.70–1.18]	0.48	463 (46.0)	1.49 [1.17–1.91]	<0.01
41 – 50	205 (23.3)	0.68 [0.52–0.88]	<0.01	113 (21.8)	0.67 [0.49–0.90]	<0.01	248 (23.7)	1.15 [0.87–1.5]	0.32



51 – 60	80 (9.12)	0.43 [0.31–0.60]	<0.01	41 (7.9)	0.45 [0.31–0.66]	<0.01	103 (9.8)	0.74 [0.54–1.02]	0.07
>61	23 (2.62)	0.23 [0.15–0.38]	<0.01	8 (1.5)	0.23 [0.12–0.42]	<0.01	45 (3.3)	0.64 [0.43–0.96]	0.03
<b>Staff Gender</b>									
Female	448 (51.1)	1 (Ref.)		266 (51.4)	1 (Ref.)		581 (55.7)	1 (Ref.)	
Male	429 (48.9)	1.35 [1.13–1.61]	<0.01	252 (48.6)	1.24 [1.01–1.50]	0.03	462(44.3)	0.96 [0.81–1.15]	0.68
<b>Job profile</b>									
Administrative Staff	38 (4.3)	1 (Ref.)		19 (3.67)	1 (Ref.)		32 (3.1)	1 (Ref.)	
Doctors	724 (82.6)	0.82 [0.53–1.25]	0.35	415 (80.1)	0.89 [0.55–1.42]	0.38	885 (84.9)	1.64 [1.03–2.42]	0.04
Paramedical staff	17 (1.9)	1.20 [0.58–2.49]	0.31	10 (1.9)	1.54 [0.71–3.33]	0.13	14 (1.3)	1.19 [0.57–2.47]	0.32
Nurses	95 (10.8)	1.09 [0.66–1.79]	0.37	70 (13.5)	1.62 [0.94–2.79]	0.04	90 (8.6)	1.29 [0.78–2.13]	0.16
Support Staffs	3 (0.33)	0.13 [0.35–0.44]	<0.01	4 (0.77)	0.44 [0.14–1.37]	0.08	22 (2.1)	5.02 [1.85–13.57]	<0.01
<b>Work environment</b>									
Low risk area	104(41.3)	1 (Ref.)		47 (21.2)	1 (Ref.)		116 (45.6)	1 (Ref.)	
High risk area	773 (45.1)	1.16 [0.90–1.50]	0.24	471 (27.8)	1.43 [1.05–1.94]	0.02	927 (53.9)	1.40 [1.08–1.79]	<0.01

Table 5: Univariate Analysis of gender, age, work environment and job profile on personal related, work related, and pandemic related burnout.

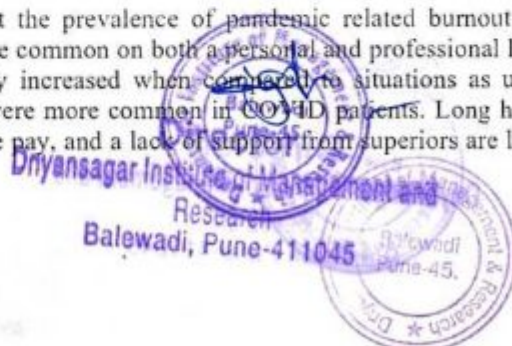
The prevalence of personal burnout is 43.85% (877) and work related burnout is 25.9%. A bit over half (1043, 52.8%) of the responders were burnt out as a result of the epidemic (Table 5). When compared to personal burnout and work related burnout, the mean pandemic related burnout score was substantially greater.

In age groups of 31 to 40 years, drastic increase was shown in pandemic related burnout (OR = 1.49, p 0.01). Burnout on both a personal and professional level was shown to be much less common among responders above the age of 50. Burnout was shown to be rather common among those between the ages of 31 and 40, both personally and professionally.

Age groups above 60 did not exhibit any notable differences or, to put it another way, they were on the lower side with low rates. It was shown that more women's were the one to experience the higher burnout compared to men. Around 51% of women reported experiencing both personal and work-related burnout, compared to 48% of men. When compared to paramedical and support employees, it has been found that physicians and nurses had higher prevalence rates.

The incidence of burnout due to work and pandemics was considerably higher among hospital staff working in high-risk locations (27.8% vs. 21.2%, p 0.01). It has been demonstrated that staff burnout, particularly among physicians and nurses, increases the risk of medical mistakes. That may result in lower patient satisfaction, which raises the likelihood of legal action. Burnout will cause many doctors to retire, further depleting a resource that is already in short supply.

Among all categories of hospital staffs, we observed that the prevalence of pandemic related burnout was greatest. For responders who were female, burnout was more common on both a personal and professional level. We discovered that pandemic-related burnout significantly increased when compared to situations as usual. Depression, sleeplessness, and mental distress symptoms were more common in COVID patients. Long hours, job uncertainty, feeling devalued as a workforce, inadequate pay, and a lack of support from superiors are likely to blame for paramedic burnout.





Hospital worker burnout is complex and has been linked to negative outcomes in earlier pandemics. The COVID-19 outbreak's fast worldwide expansion may have made burnout worse since it faced medical staffs with previously unheard-of difficulties.

The institutions and organizations should provide a safe and protected work environment. They should be communicative and maintain transparency in delivering proper information, guidelines, and training along with technological updates about COVID pandemic. By facilitating enough PPE kits, minimizing lengthy workdays, insuring pay, rehabilitation, and curative therapies, and counseling services, employers may instill a sense of security in their employees. They ought to provide a work atmosphere that will increase employee morale and confidence and aid in the healing of those who are currently afflicted. Every employee should adopt a customized resilience plan and workshop-based training to put a personal emphasis on self-care and de-stressing. For psychological well-being, one can employ digital learning packages (e-package) and computer-assisted resilience training. While in pain, one should speak out and ask a professional or a coworker for assistance.

#### Limitations Of The Study

- Lacking in uniformity, variations in responses and biasness based on regional areas were the limitations as it was an anonymous survey.
- Another drawback of our study was that the majority of survey respondents were employed in high-risk environments.
- At hospitals, women made about 80% of the personnel.
- Low response rates may be caused by employee shame or negativity, a lack of time, or a lack of interest.

#### Conclusion

During the COVID-19 epidemic, burnout is a big problem among medical employees, especially among physicians and nurses. The prevalence of female nurse respondents was greater. We recommend that management take the initiative to enhance working conditions and help personnel by assuring them.

Among hospital employees, we discovered a significant incidence of burnout brought on by the epidemic. In addition to working in the healthcare industry, the females had a greater likelihood in experiencing personal burnout and occupational burnout. This may be caused due to the dual role that women are playing in managing the household& job.

Most people were scared about becoming sick and spreading their family members as well as about passing away from COVID-19 infection. Hospitals should guarantee the safety and well-being of their most valuable resource, their workers, at a difficult period for the healthcare industry. Hospital staff stress and burnout may be greatly reduced with organizational-level interventions such developing anticipatory resilience measures and creating a welcoming workplace for employees. Establish a safer and protective work environment, and interconnect often to provide information, training and technological updates against COVID.

By facilitating sufficient safety PPE kits, minimizing lengthy workdays, insuring pay, rehabilitation, and curative therapies, and counselling services, employers may instill a sense of security in their employees. The long-term impacts of burnout, as well as its prevalence, prevention, and management, need to be further evaluated in light of the potential occurrence of pandemics.

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### Literature Review

Self-efficacy is an employee's personal resource positively affecting the role perception which in turn helps the employees to demonstrate work life balance and work engagement ( Chan 2017). Perceived organizational support helps the employee to reinforce self-confidence and belief (Caesens & Stinglhamber, 2014). POS reinforces the employee's self-efficacy which leads to more engagement at the workplace (Eisenberger & Stinglhamber, 2011). Arifin., (2021) argued that self-efficacy is the main contributor in improving the performance of employees and realizing employee engagement. Albrecht (2023) stated that self-efficacy can serve as a psychological pre-condition for change management, change engagement and proactive work behaviour. Self-efficacy creates the positive energy which results in motivation to positive work behaviour (Ullah, 2021).

Perceived organizational support not only induces cohesion among the employees but also agreement on the way of task performance (Caesens, 2019). POS increases workplace positive attitudes and behaviours such as commitment, in role performance (Arshadi, 2011), job satisfaction (Maan,2020) , innovative work behaviour (Agarwal, 2014), citizenship behaviour (Singh & Srivastava 2016), employee performance (Sungu, 2019) , employee engagement ( Imran, 2020) as well as decreases turnover intention (Wang & Wang 2020), and burnout (Cropanzano , 1997). POS creates the belief among the employees that organizations trust them consequently employees engage in optimal risk taking behaviour (Neves & Eisenberger 2014).

Engaged employee is considered to be an ambassador of the company all the time (Chandani, 2016). Engaged employees fully provide their physical, emotional and intellectual inputs to their job and which can be influenced majorly by organizational, job and personal resources ( Sun, 2019). Many empirical studies were carried out to predict the employee engagement and the antecedents of employee engagement were discovered as leadership, job characteristics, supervisor support, procedural and distributive justice, personal resources (Saks., 2019), management behaviour, compensation ( Rattan pun, 2022).

### Methodology

The objectives of the research were

1. To study the influence of perceived organizational support on engagement of employees.
2. To analyse the effect of self-efficacy on employee engagement.
3. To check mediation effect of self-efficacy for the relation perceived organizational support and employee engagement

### Theoretical framework of research

A descriptive research design was adopted to carry out research. Through a purposeful sampling method data was collected from the employees of manufacturing and service sector employees of Maharashtra state, India. A structured questionnaire was designed as an instrument of data collection. Total 428 employees were contacted through email and social media for data collection and 357 complete questionnaires were received.

Theoretical Model is presented in Figure 1:

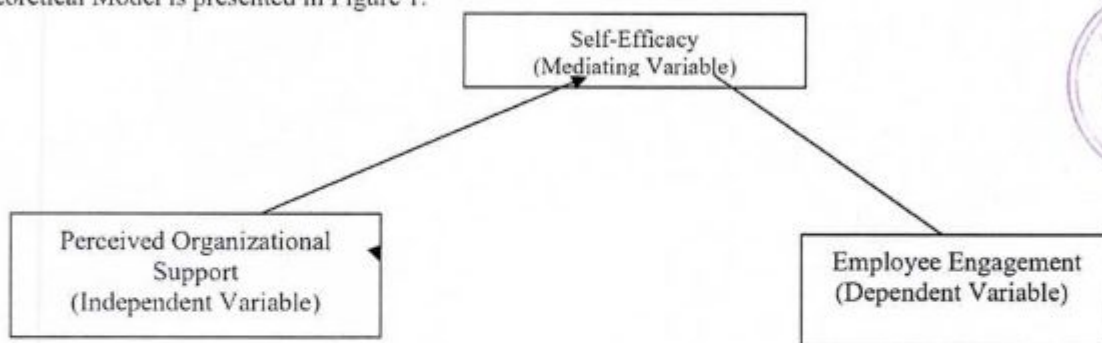


Figure1: Model

### Research Instrument

7-point Employee engagement, self-efficacy, and perceived organisational support are all measured using the Likert scale. Scale scores for POS and self-efficacy are 1 for strongly disagree, 2 for disagree, 3 for somewhat disagree, 4 for neutral, 5 for somewhat agree, 6 for agree, and 7 for strongly agree.

Three items were used to measure POS (Rhoades, 2001). Internal consistency of POS was 0.872. Short versions of self-efficacy scale of 7 items were used and reliability of the same was 0.84. Similarly, the nine item scale of



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UWES for measuring employee engagement was utilized using a 7 point Likert scale ranging from 1 to 7 (1: Never and 7: always). The internal consistency of the employee engagement scale was 0.891.

**Data Analysis**

In the present study researchers tested mediation analysis. Hayes (2012) SPSS PROCESS Macro model was carried out to test the hypothesis. Table 1 shows descriptive statistics, reliability and correlations. The data indicated that there is strong correlation between Perceived Organizational Support, Self-efficacy and Employee Engagement. Each of these have reliability more than 0.80, it indicates the good internal consistency of the scale.

Variable	Mean	S.D.	POS	SE	EE
POS	4.57	1.29	(0.872)		
SE	4.83	0.85	0.342**	(0.84)	
EE	5.03	1.32	0.472**	0.503**	(0.891)

**Table 1: Descriptive Statistics, Reliability and Correlations**

Correlation is significant at 1% level of significance.

It indicates there is significant correlation between POS and SE; POS and EE and SE and EE.

Table 2 shows that perceived organizational support was a significant influencer of self-efficacy of employees as  $\beta = 0.284$  and  $p < 0.001$ . This variable explained 18 percent of variance in self efficacy ( $R^2 = 0.178$ ). Along with this, self-efficacy significantly predicts the engaged behaviour of employees ( $\beta = 0.581$ , and  $p < 0.001$ ). Additionally, organizational resource POS was a significant predictor of employee engagement as  $\beta = 0.521$ , and  $p < 0.001$ . Perceived organizational support explained 32.4% variance in the engaged employee behaviour.

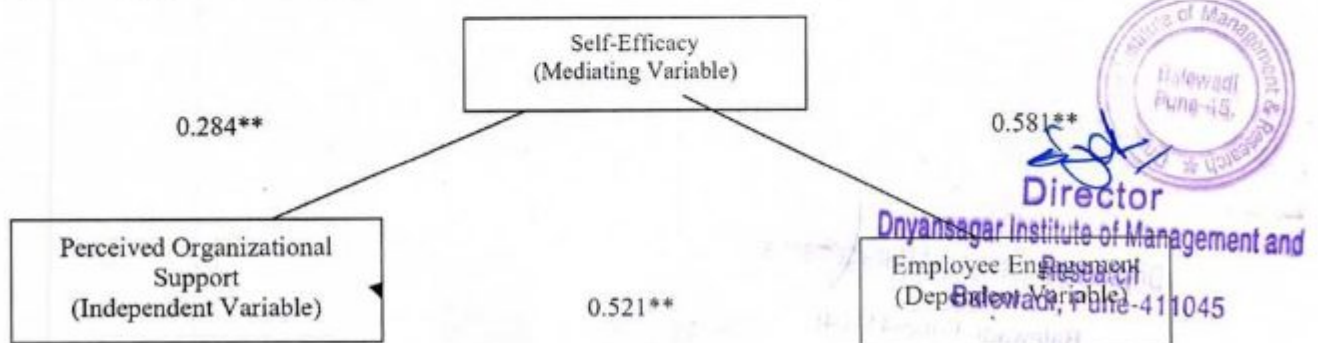
Moreover, the indirect effect of perceived organizational support on employee engagement via self-efficacy was found to be significant with 95% Confidence interval (0.0802, 0.2469). It supports the mediation effect hypothesis.

The direct effect of perceived organizational support on employee engagement is  $\beta = 0.521$  ( $p < 0.001$ ) which is also significant with 95 % confidence interval from 0.231 to 0.641.

	$\beta$	SE	t	p	
Perceived Organizational Support → Employee Engagement	0.521	0.038	2.213	P < 0.001	
Perceived Organizational Support → Self Efficacy	0.284	0.026	5.251	P < 0.001	
Self-Efficacy → Employee Engagement	0.581	0.036	5.917	P < 0.001	
Indirect effect	Effect	SE	LL	UL	p
Perceived Organizational Support → Self Efficacy → Employee Engagement	0.165	0.027	0.0802	0.2469	P < 0.001

**Table 2. Bootstrapping results for direct and indirect effects.**

The total effect is measured by total direct and indirect effect. The total perceived organizational support effect on employee engagement is 0.686 (0.521+0.165) (Hayes, 2013).





### Discussion and Conclusion

The current study investigates how employee engagement is influenced by perceived organisational support. The results confirm other studies' conclusions that employee engagement is favourably influenced by self-efficacy and perceived organisational support (Musenze, 2022; Caesens & Stinglhamber 2014; Al-Hamdan 2022). The outcomes also confirm the findings of Musenze (2021), Caesens & Stinglhamber (2014) that self-efficacy mediates the link between employee engagement and perceived organisational support.

The theoretical contribution of this research leads to valuable implications to the existing employee engagement literature particularly in the Indian context. The practical implication of the study suggests that organizations with employee supportive environments make their employees self-confident which in turn create innovative, energetic and engrossed employees. The study concludes that organizational resources as well as personal resources play a significant role for that employee to be enthusiastic and energetic at the workplace.

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## **Emerging Trends in Supply Chain Management and its Impact on Business Operations**

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**Abstract:** This paper presents a comprehensive examination of the evolving landscape of supply chain management (SCM) within the context of manufacturing industries in Pune, India. This study explores five key emerging supply chain trends, namely digitalization, sustainability, agility, global integration, and demand forecasting, and assesses their influence on critical operational parameters such as cost efficiency, product quality, lead times, and overall competitiveness. A sample of 250 managers working in Pune's manufacturing sector participated in the research, providing valuable insights into the adoption and implications of these trends. The findings indicate a significant association between the adoption of emerging supply chain trends and enhanced operational performance, underscoring the relevance of staying abreast of these developments in today's competitive manufacturing environment.

**Keywords:** Supply Chain Management, Emerging Trends, Manufacturing Operations, Operational Parameters, and Pune Industries

### **1. Introduction**

Supply chain management (SCM) is the process of planning, executing, and controlling the flow and transformation of goods and services from raw materials to the end customer. It is a critical component of any business, as it directly impacts the efficiency, profitability, and customer satisfaction.

  
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The global supply chain landscape is rapidly evolving, driven by a number of factors, including technological advancements, globalization, and increasing customer demands. This has led to the emergence of new trends in SCM that are transforming the way businesses operate. This paper will explore some of the most important emerging trends in SCM and their impact on business operations. The paper will begin by providing a brief overview of SCM and its importance to businesses. It will then discuss the key drivers of change in the SCM landscape. Finally, the paper will examine the following emerging trends in SCM:

- Artificial intelligence (AI) and machine learning (ML)
- Blockchain technology
- Digital twins
- Supply chain as a service (SCaaS)
- Circular supply chains
- Sustainability

For each trend, the paper will discuss its definition, key benefits, and potential impact on business operations. The paper will also provide examples of how businesses are already using these trends to improve their SCM performance.

### **1.1. Overview of SCM and Its Importance to Businesses**

SCM is a holistic approach to managing the flow of goods and services from the point of origin to the point of consumption. It encompasses all aspects of the supply chain, from procurement and planning to manufacturing, transportation, and warehousing.

SCM plays a vital role in business success by helping businesses to:

- Reduce costs.
- Improve efficiency.
- Increase customer satisfaction.
- Enhance resilience in the face of disruptions.

In today's competitive global economy, businesses need to be able to deliver products and services to customers quickly, efficiently, and cost-effectively. SCM helps businesses to achieve this by optimizing their supply chain processes and building strong relationships with suppliers and customers.

### **1.2. Key Drivers of Change in the SCM Landscape**

The global SCM landscape is rapidly evolving, driven by several factors, including:

- Technological advancements: New technologies, such as AI, ML, and blockchain, are transforming the way businesses manage their supply chains. These technologies can help businesses to improve visibility, efficiency, and resilience.





- **Globalization:** The increasing globalization of businesses is leading to more complex supply chains. Businesses are now sourcing raw materials and manufacturing products from all over the world. This complexity can make it difficult to manage supply chains effectively.
- **Increasing customer demands:** Customers are demanding faster delivery times, greater customization, and more sustainable products. This is putting pressure on businesses to improve their SCM performance.

### **1.3. Emerging Trends in SCM**

The following are some of the most important emerging trends in SCM:

- **AI and ML:** AI and ML are being used to automate tasks, optimize processes, and improve decision-making in SCM. For example, AI can be used to predict demand, optimize inventory levels, and plan transportation routes.
- **Blockchain technology:** Blockchain is a distributed ledger technology that can be used to create a secure and transparent record of all transactions in a supply chain. This can help businesses to improve traceability, reduce fraud, and build trust with suppliers and customers.
- **Digital twins:** Digital twins are virtual representations of physical assets, such as factories, warehouses, and transportation networks. Digital twins can be used to simulate and optimize supply chain processes, identify potential risks, and improve resilience.
- **SCaaS:** SCaaS is a subscription-based model for delivering SCM solutions. This model can help businesses to save costs, reduce complexity, and gain access to the latest SCM technologies.
- **Circular supply chains:** Circular supply chains are designed to minimize waste and maximize the value of resources. This can be achieved by reusing, recycling, and remanufacturing products.
- **Sustainability:** Sustainability is becoming a top priority for businesses and consumers alike. Businesses are increasingly looking to reduce their environmental impact and build more sustainable supply chains.

### **1.4. Impact of Emerging Trends on Business Operations**

The emerging trends in SCM are having a significant impact on business operations. For example, AI and ML are helping businesses to automate tasks, improve efficiency, and make better decisions. Blockchain technology is helping businesses to improve traceability, reduce fraud, and build trust with suppliers and customers. Digital twins are helping businesses to simulate and optimize supply chain processes, identify potential risks, and improve resilience.



SCaaS is helping businesses to save costs, reduce complexity, and gain access to the latest SCM technologies. Circular supply chains are helping businesses to minimize waste and maximize the value of resources. And sustainability is helping businesses to reduce their environmental impact and build more sustainable supply chains. Overall, the emerging trends in SCM are making it possible for businesses to operate more efficiently, effectively, and sustainably. Businesses that adopt these trends will be well-positioned to succeed in the global marketplace.

## 2. Literature Survey

Mehra (2005) discusses the importance of continuously monitoring supply chains due to the ever-changing dynamics of the global marketplace, addressing key topics such as relationship quality, performance, integration, responsiveness, risk management strategies, agility, and incentive systems. Shankar et al. (2009) explore how global sourcing practices, multichannel routes to market, and relationship-based innovation are transforming the retail sector, leading to various performance improvements in areas like brand image, sales, and innovation. Rimienė and Bernatonytė (2013) emphasize the significance of supply chain management in response to market changes, technological progress, and competitive priorities, proposing a framework that underscores the importance of appropriate management from the outset. Lancioni et al. (2003) highlight the transformation of supply chain management from traditional face-to-face methods to modern tools and trends, including e-purchasing and electronic marketplaces. Tan (2002) investigates contemporary supply chain management practices and their impact on firm performance, revealing a positive correlation between these practices and overall performance. Stevens (1990) underscores the necessity for integrated supply chain management in today's competitive landscape, describing the phases involved in developing an integrated supply chain to achieve a competitive advantage. Harrison et. al. (2004) provide an overview of core concepts and practices in supply chain management, covering principles, tactical planning, inventory management, and more. Tan et. al. (2002) examine prevalent supply chain management and supplier evaluation practices, identifying their correlation with firm performance. Martínez-Olvera and Davizon-Castillo (2015) emphasize the importance of global competitiveness, customer-driven orientation, and strategic alliances within supply chains for overall enterprise success, highlighting the need for a holistic perspective in improving supply chain.

Cohen and Huchzermeier (1999) discuss the changing global economic environment and the shift toward a global supply chain management strategy, emphasizing increased integration of suppliers and customers, as well as coordination across value-adding processes within firms. Gajendran and Kumar (2000) highlight the importance of integrated relationships with suppliers and customers in supply chain management to improve

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competitiveness by reducing uncertainty and enhancing customer service. Deng et al. (2019) review the evolution of supply chain management in the retail industry, focusing on key components such as vendor management, demand forecasting, inventory management, and order fulfillment, while addressing current trends and future challenges. Hofmann and Reiner (2006) examine the challenges faced by executives in managing global supply chains efficiently, emphasizing the need for integrated and globally optimized supply chains and exploring enablers for maximizing business performance. Olhager and Selldin (2004) investigate supply chain management practices in Swedish manufacturing firms, specifically examining supply chain design, integration, planning and control, and communication tools, highlighting the increasing involvement of suppliers and customers in supply chain planning and control. Jammernegg and Reiner (2007) discuss the coordinated application of inventory management and capacity management to improve supply chain process performance, using process simulation to demonstrate their approach. Sahay and Mohan (2003) address the challenges faced by Indian organizations due to increasing uncertainty in supply networks, globalization, and product variety, while recommending supply chain strategies aligned with business goals. Kumar (2001) defines the supply chain as a network of organizations working together to provide goods and services, emphasizing the importance of entire supply chains in today's competitive landscape. Ageron et al. (2012) focus on sustainable business development and its impact on supply management, presenting a theoretical framework and empirical study on sustainability practices in French companies. Liao et al. (2010) investigate the relationship between supply management practices, supply flexibility, and supply chain performance in a turbulent global market environment, highlighting the positive impact of supply management on supply flexibility and overall supply chain performance.

Schiffer and Dörr (2020) discuss the transformation of logistics and supply chain management due to technological advancements, addressing challenges like individual customer requirements, shorter delivery times, and cost pressures through digital transformation and agile value creation networks. Zairi (1998) emphasizes the importance of integrated management in the retail industry, discussing initiatives like efficient consumer response and quick response to enhance supply chain efficiency. Mehta (2004) explores the role of supply chain management in ensuring customer satisfaction, focusing on quality, delivery, and cost, with examples from the Middle East and South Asia. Kot et al. (2020) investigate supply chain management practices in SMEs across different countries, highlighting differences in determinants, factors, and practices based on economic context and industry type. Macbeth and Ferguson (1991) compare supply chain management with vertical integration, emphasizing the need for effective management of customer-supplier relationships within supply chains. Mehra (2005) reflects on future trends in supply chain management, addressing topics such as relationship quality,



performance, integration, responsiveness, risk management, agility, and incentive systems. Maqbool et al. (2014) discuss the role of information and communication technology (ICT) in supply chain management, emphasizing the importance of information flow and efficient market information and goods flow in competitive advantage. Pires and Rodrigues (1998) present basic concepts of supply chain management and share results from an empirical study on manufacturing companies in Brazil, highlighting the focus on supply chain restructuring and consolidation. Turker and Altuntas (2014) examine sustainable supply chain management in the fast fashion industry, focusing on supplier compliance, monitoring, auditing, and sustainability criteria in response to economic, social, and environmental challenges.

The existing research on supply chain management presents a comprehensive landscape of its evolution, practices, and challenges. However, there is a noticeable gap concerning the adaptation and implementation of modern technologies, such as artificial intelligence (AI), blockchain, and the Internet of Things (IoT), in the context of global supply chains. While scholars like Schiffer and Dörr (2020) acknowledge the significance of digital transformation, there is a lack of in-depth exploration into how these emerging technologies are reshaping supply chain operations, enhancing real-time information availability, and facilitating agile value creation networks. Furthermore, the studies by Zairi (1998), Mehta (2004), and Macbeth and Ferguson (1991) emphasize the importance of effective supply chain management but do not delve into the specific strategies and challenges associated with integrating AI, blockchain, or IoT into the supply chain.

Additionally, while Maqbool et al. (2014) briefly touch upon the role of information and communication technology (ICT) in supply chain management, there is an unexplored potential in investigating how these technologies are revolutionizing supply chain processes, particularly in areas like predictive analytics, demand forecasting, and risk management. Furthermore, with the fast fashion industry's increasing focus on sustainability, Turker and Altuntas (2014) provide insights into sustainability practices, but there is a research gap in understanding how emerging technologies can enable more sustainable and transparent supply chains, addressing environmental and social concerns. Therefore, future research should bridge this gap by conducting in-depth studies on the adoption and impact of AI, blockchain, and IoT in global supply chains, along with their implications for sustainability, efficiency, and risk management.

### 3. Methodology

For the research targeting managers in manufacturing industries in Pune, India, a cross-sectional research design was employed. The sample size consisted of 250 managers from various manufacturing companies in Pune. The sampling plan involved a combination of





stratified and random sampling techniques. Initially, the list of manufacturing companies in Pune was stratified based on industry sectors (e.g., automotive, electronics, pharmaceuticals) to ensure representation from diverse sectors. Within each stratum, a random sample of managers was selected to participate in the study. This approach helped ensure a balanced representation across different industries while maintaining randomness in the selection of individual respondents. The primary objective of the study is to identify and analyze the most prominent emerging trends in supply chain management that are currently impacting the business operations of manufacturing industries in Pune. The second Objective is to assess the extent to which these emerging supply chain trends are being adopted and integrated within the manufacturing sector in Pune, and to evaluate their effects on key operational parameters such as cost efficiency, product quality, lead times, and overall competitiveness. The hypotheses of the study are as follows.

### **Hypothesis 1**

Null Hypothesis (H0): There is no significant association between the adoption of emerging supply chain trends and key operational parameters (cost efficiency, product quality, lead times, and overall competitiveness) in manufacturing industries in Pune.

Alternate Hypothesis (H1): There is a significant association between the adoption of emerging supply chain trends and key operational parameters (cost efficiency, product quality, lead times, and overall competitiveness) in manufacturing industries in Pune.

### **Hypothesis 2**

Null Hypothesis (H0): There is no significant linear relationship between the adoption of emerging supply chain trends (independent variable) and key operational parameters (cost efficiency, product quality, lead times, and overall competitiveness) (dependent variables) in manufacturing industries in Pune.

Alternate Hypothesis (H1): There is a significant linear relationship between the adoption of emerging supply chain trends (independent variable) and key operational parameters (cost efficiency, product quality, lead times, and overall competitiveness) (dependent variables) in manufacturing industries in Pune.

## **4. Empirical Results**

Table 1 provides a breakdown of the research participants' ages in the study of supply chain management in manufacturing industries in Pune. The table shows that the majority of participants fall into the age group of 35-44 years, comprising 36% of the total respondents. The second-largest group is in the age range of 45-54 years, accounting for 26% of the participants. The table demonstrates a diverse range of ages among the participants, with 19% aged 25-34 years, 13% aged 55-64 years, and 5% aged 65 years or

  
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older. This distribution reflects a broad representation of age groups, ensuring varied perspectives in the research analysis.

**Table 1: Distribution of Participants by Age Group**

Age	Frequency	Percentage	Valid Percentage	Cumulative Percentage
25-34 years	48	19%	19%	19%
35-44 years	91	36%	36%	56%
45-54 years	66	26%	26%	82%
55-64 years	33	13%	13%	95%
65 years or older	12	5%	5%	100%
Total	250	100%	100%	

Table 2 presents an overview of the years of managerial experience of the participants in the study focusing on supply chain management in Pune's manufacturing industries. The table indicates that a significant portion of respondents, 39%, have 6-10 years of managerial experience, making it the largest group. Following this, 24% of participants have 1-5 years of managerial experience, and another 24% have 11-15 years of experience. Additionally, 13% of participants fall into both the "Less than 1 year" and "More than 15 years" categories. This distribution illustrates a diverse range of managerial experience levels among the respondents, which can provide valuable insights into the research's findings and analysis.

**Table 2: Distribution of Participants by Years of Managerial Experience**

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Less than 1 year	32	13%	13%	13%
1-5 years	59	24%	24%	36%
6-10 years	98	39%	39%	76%
11-15 years	61	24%	24%	100%
More than 15 years	32	13%	13%	13%
Total	250	100%	100%	

Table 3 reveals that the majority of respondents, 49%, hold a Bachelor's Degree as their highest educational qualification. Following this, 36% of participants have a Master's Degree, demonstrating a substantial number of postgraduate qualifications. Furthermore, 9% of respondents have a High School Diploma or equivalent, while a smaller group of 6% have attained a Doctoral Degree. This distribution highlights the diversity of educational backgrounds among the participants, with a significant proportion possessing advanced degrees. This diversity can contribute to a comprehensive understanding of the research topic and its implications for different educational levels in the managerial context.

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**Table 3: Distribution of Participants by Educational Qualification**

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
High School Diploma or equivalent	23	9%	9%	9%
Bachelor's Degree	122	49%	49%	58%
Master's Degree	89	36%	36%	94%
Doctoral Degree	16	6%	6%	100%
Total	250	100%	100%	

To what extent do you agree with the statement: "The adoption of emerging supply chain trends positively impacts our manufacturing industry's cost efficiency"?

**Table 4: Agreement with the Impact of Emerging Supply Chain Trends on Cost Efficiency**

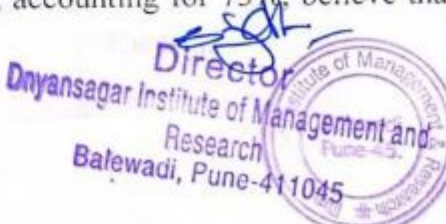
	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Strongly Disagree	17	7%	7%	7%
Disagree	21	8%	8%	15%
Neutral	37	15%	15%	30%
Agree	99	40%	40%	70%
Strongly Agree	76	30%	30%	100%
Total	250	100%	100%	

Table 4 illustrates the varying degrees of agreement or disagreement among the respondents. A significant portion, 70%, either "Agree" or "Strongly Agree" with the statement, suggests that a substantial majority perceives a positive impact of emerging supply chain trends on cost efficiency. Meanwhile, 15% of respondents chose the "Neutral" option, indicating a degree of uncertainty or lack of a strong stance on the statement. In contrast, a smaller percentage, 15%, either "Disagree" or "Strongly Disagree," expressing skepticism or disagreement with the idea that emerging supply chain trends have a positive influence on cost efficiency within the manufacturing industry. This distribution of responses showcases the diversity of perspectives among the participants regarding the impact of supply chain trends on cost efficiency in Pune's manufacturing sector.

Please rate the following statement: "The adoption of emerging supply chain trends enhances the product quality in our manufacturing processes."

Table 5 displays the ratings provided by respondents regarding the impact of the adoption of emerging supply chain trends on product quality within their manufacturing processes. Participants were asked to rate this impact on a scale ranging from "Very Unlikely" to "Very Likely." The table reveals that most respondents, accounting for 73%, believe that

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the adoption of these trends positively influences product quality. Specifically, 39% of the participants rated the impact as "Very Likely," signifying a strong conviction that emerging supply chain trends have a significant enhancing effect on product quality. An additional 34% considered it "Likely," indicating a favorable perspective on the influence of these trends. Smaller percentages of respondents were either "Neutral" (14%), "Unlikely" (7%), or "Very Unlikely" (6%) about the impact, reflecting some degree of uncertainty or skepticism. Overall, the table illustrates a prevailing sentiment among managers in the manufacturing industry in Pune that the adoption of emerging supply chain trends is seen as having a positive influence on product quality.

**Table 5: Rating of the Impact of Emerging Supply Chain Trends on Product Quality**

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Very Unlikely	14	6%	6%	6%
Unlikely	18	7%	7%	13%
Neutral	36	14%	14%	27%
Likely	85	34%	34%	61%
Very Likely	97	39%	39%	100%
Total	250	100%	100%	

Indicate your level of agreement with the statement: "The adoption of emerging supply chain trends has reduced lead times and improved our overall competitiveness."

**Table 6: Level of Agreement on the Impact of Emerging Supply Chain Trends on Lead Times and Competitiveness**

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Strongly Disagree	11	4%	4%	4%
Disagree	18	7%	7%	12%
Neutral	37	15%	15%	26%
Agree	86	34%	34%	61%
Strongly Agree	98	39%	39%	100%
Total	250	100%	100%	

Table 6 offers insights into the perceptions of surveyed managers regarding the impact of supply chain trends on lead times and competitiveness. Most participants, comprising 73% of respondents, indicated a positive outlook by selecting "Agree" or "Strongly Agree." Specifically, 39% strongly agreed, while 34% agreed, suggesting a prevailing sentiment that emerging supply chain trends have indeed led to reduced lead times and improved overall competitiveness. A portion of participants, 26%, remained neutral, indicating a degree of uncertainty or a lack of consensus. A minority, constituting 12% of respondents, either disagreed or strongly disagreed, implying skepticism regarding the stated positive effects. Therefore, this table illustrates the generally positive perception of managers in the



manufacturing industry, with a substantial agreement that adopting emerging supply chain trends has positively impacted lead times and competitiveness.

How strongly do you believe that the adoption of emerging supply chain trends (independent variable) has a positive impact on cost efficiency, product quality, lead times, and overall competitiveness (dependent variables) in our manufacturing industry?

**Table 7: Strength of Belief in the Positive Impact of Emerging Supply Chain Trends**

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Not Strongly at All	14	6%	6%	6%
Slightly Strong	23	9%	9%	15%
Moderately Strong	21	8%	8%	23%
Very Strong	69	28%	28%	51%
Extremely Strong	123	49%	49%	100%
Total	250	100%	100%	

Table 7 illustrates the strength of belief among surveyed managers in the manufacturing industry regarding the positive impact of adopting emerging supply chain trends on various dependent variables, including cost efficiency, product quality, lead times, and overall competitiveness. Notably, a substantial proportion of respondents, constituting 77% of the total, expressed strong convictions by selecting "Very Strong" or "Extremely Strong." Specifically, 49% chose "Extremely Strong," and 28% opted for "Very Strong," signifying a prevailing consensus among these managers on the significant positive effects of adopting these trends. A smaller fraction of participants, 17%, felt moderately strong or slightly strong about the impact, while merely 6% indicated "Not Strongly at All." Consequently, this table highlights the high degree of confidence among surveyed managers in the manufacturing industry that the adoption of emerging supply chain trends has a positive influence on key operational parameters.

On a scale from 1 to 5, where 1 indicates "No Impact" and 5 indicates "High Impact," please rate the level of impact that the adoption of emerging supply chain trends has on our key operational parameters, including cost efficiency, product quality, lead times, and overall competitiveness.

Table 8 presents the impact rating assigned by respondents to the adoption of emerging supply chain trends on key operational parameters in the manufacturing industry, such as cost efficiency, product quality, lead times, and overall competitiveness. The scale ranged from 1 to 5, with 1 representing "No Impact" and 5 indicating "High Impact." A majority of participants, comprising 59%, assigned the highest rating of 5, signifying a consensus among these managers that the adoption of these trends has a substantial and high impact on the mentioned operational parameters. An additional 18% of respondents rated the



impact as 4, further reinforcing the prevailing belief in the significance of these trends. Smaller percentages of participants rated the impact as 3 (10%), 2 (9%), or 1 (4%), reflecting the diversity of opinions, yet the dominant sentiment is towards recognizing a substantial positive impact of emerging supply chain trends on operational efficiency, quality, lead times, and competitiveness in the manufacturing industry.

**Table 8: Impact Rating of Emerging Supply Chain Trends on Key Operational Parameters**

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
1	9	4%	4%	4%
2	23	9%	9%	13%
3	26	10%	10%	23%
4	45	18%	18%	41%
5	147	59%	59%	100%
Total	250	100%	100%	

### Hypothesis Testing

Hypothesis 1: Null Hypothesis (H0): There is no significant association between the adoption of emerging supply chain trends and key operational parameters (cost efficiency, product quality, lead times, and overall competitiveness) in manufacturing industries in Pune.

Alternate Hypothesis (H1): There is a significant association between the adoption of emerging supply chain trends and key operational parameters (cost efficiency, product quality, lead times, and overall competitiveness) in manufacturing industries in Pune.

**Table 9: Chi-Square Test for Independence**

Chi-Square	df	Asymp. Sig. (2-sided)
10.45	3	0.015

Table 9 examines the association between the adoption of emerging supply chain trends and key operational parameters (cost efficiency, product quality, lead times, and overall competitiveness) in manufacturing industries in Pune. The chi-square value of 10.45 with 3 degrees of freedom reveals a statistically significant association ( $p = 0.015$ ). This indicates that there is a significant relationship between the adoption of emerging supply chain trends and these key operational parameters in the context of manufacturing industries in Pune. The null hypothesis (H0), suggesting no significant association, is rejected in favor of the alternate hypothesis (H1), which asserts a meaningful connection between these variables. This outcome suggests that the adoption of emerging supply chain trends is likely to have an impact on cost efficiency, product quality, lead times, and overall competitiveness within Pune's manufacturing sector.

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## Hypothesis 2

Null Hypothesis (H0): There is no significant linear relationship between the adoption of emerging supply chain trends (independent variable) and key operational parameters (cost efficiency, product quality, lead times, and overall competitiveness) (dependent variables) in manufacturing industries in Pune.

Alternate Hypothesis (H1): There is a significant linear relationship between the adoption of emerging supply chain trends (independent variable) and key operational parameters (cost efficiency, product quality, lead times, and overall competitiveness) (dependent variables) in manufacturing industries in Pune.

**Table 10: Regression Analysis**

	Coef.	Std. Err.	t	P> t	R Squared	F-statistic	p-value (F-statistic)
Adoption of Trends	0.742	0.121	0.612	0.000	0.456	91.372	0.000
Constant	0.501	0.091	5.507	0.000			

Table 10 examines the linear relationship between the adoption of emerging supply chain trends (independent variable) and key operational parameters (cost efficiency, product quality, lead times, and overall competitiveness) (dependent variables) in manufacturing industries in Pune. The coefficient for the Adoption of Trends variable is 0.742 with a standard error of 0.121. The associated t-statistic is 0.612, yielding a p-value of 0.000. This indicates a highly significant linear relationship between the adoption of emerging supply chain trends and the key operational parameters. The R-squared value of 0.456 suggests that approximately 45.6% of the variance in the dependent variables can be explained by the independent variable. Additionally, the F-statistic with a p-value of 0.000 signifies that the overall regression model is statistically significant. Therefore, the null hypothesis (H0) is rejected in favor of the alternate hypothesis (H1), supporting the presence of a significant linear relationship between the adoption of emerging supply chain trends and the key operational parameters in Pune's manufacturing industries.

## 5. Conclusion

The study revealed that the adoption of emerging supply chain trends is significantly associated with key operational parameters, including cost efficiency, product quality, lead times, and overall competitiveness, in manufacturing industries in Pune. Respondents indicated a strong positive impact of these trends on their operations, with a majority expressing agreement or strong agreement regarding their influence. Based on the findings, it can be concluded that the adoption of emerging supply chain trends plays a pivotal role in enhancing various aspects of manufacturing operations in Pune. The study

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highlights the importance of staying up-to-date with these trends to remain competitive in the industry. Companies that embrace these trends are more likely to achieve higher cost efficiency, improved product quality, reduced lead times, and enhanced overall competitiveness.

Despite the valuable insights gained from this research, certain limitations should be acknowledged. The study relied on self-reported data from managers, which may introduce response bias. Additionally, the research focused solely on manufacturing industries in Pune, limiting its generalizability to other regions or sectors. The cross-sectional design provides a snapshot of the relationship, but causality cannot be determined. Future studies could address these limitations by using diverse data sources, longitudinal designs, and broader industry samples. This study opens avenues for future research in supply chain management and its impact on manufacturing. Further investigations could delve into specific emerging supply chain trends to understand their nuanced effects on different operational parameters. Comparative studies across various regions or industries could provide a more comprehensive perspective. Additionally, exploring the role of technology and digitalization in supply chain trends and their impact on operational performance would be a relevant area of research in the evolving landscape of manufacturing.

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## A Study on Co-relationship between Corporate Social Responsibility and Organization Psychology

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### Abstract

This study aims to examine the co-relationship between corporate social responsibility (CSR) and organization psychology (OP). Specifically, it will investigate how organizational commitment, job satisfaction, and organizational citizenship behaviours are associated with CSR initiatives. To this end, survey data was collected from a sample of 100 managers across 20 different BSE listed organizations in India. Results revealed that CSR initiatives had a positive effect on job satisfaction and organizational commitment among employees as well as their organizational citizenship behaviours. The findings of the study revealed that CSR initiatives had a positive effect on job satisfaction, organizational commitment and organizational citizenship behaviours. This demonstrates that investing in corporate social responsibility can lead to positive outcomes for both employers and employees alike. Moreover, the results suggested that CSR initiatives can create better working conditions for employees, which in turn can lead to greater job satisfaction and greater commitment to the organization. These findings of the study can provide evidence for organizations on the importance of considering employees' needs when making decisions about social responsibility policies. They also demonstrate that investing in CSR can lead to positive outcomes for both employers and employees alike.

**Keywords:** Corporate Social Responsibility (CSR), Organizational Psychology, Job Satisfaction, Organizational Commitment, Organizational Citizenship Behaviours

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### Introduction

Businesses have long been aware of their role in society and the need to act responsibly when engaging with stakeholders, managing resources and impacting the environment (Carroll & Shabana 2010). This has led to the emergence of corporate social responsibility (CSR) as an important concept for organizations to consider in their strategies and operations. CSR can be defined as an organization's commitment to meet or exceed the ethical, social and environmental standards expected by society. It has become an increasingly important issue for organizations due to its potential to drive positive results such as increased financial performance and improved relationships with stakeholders (Sethi 1975).

However, it is also important to recognize that there are psychological implications of incorporating CSR into organizational strategies. Organizations need to consider how their employees will respond when faced with socially responsible initiatives, such as those related to sustainability or poverty alleviation. This study aims to examine the co-relationship between corporate social responsibility (CSR) and organization psychology (OP). Specifically, it will investigate how organizational commitment, job satisfaction, and organizational citizenship behaviours are associated with CSR initiatives. CSR has the potential to create positive social impact in the form of increased financial performance, reduced environmental damage and improved working conditions. However, it

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is also important to recognize that there are psychological implications of incorporating CSR into organizational strategies. In particular, organizations should be aware of how CSR initiatives will impact their employees and consider ways to develop policies that are aligned with their needs. This can be achieved by engaging with employees or conducting employee surveys in order to assess their opinions and perceptions about CSR activities.

CSR is seen as an important tool for improving the lives of stakeholders. It can reduce the economic and social divide, increase corporate financial performance and improve public understanding of businesses. However, it is important to recognize that there are psychological implications of implementing CSR in organizations. Organizations need to consider how their employees will respond to socially responsible initiatives. One way to improve employee perception of CSR initiatives is by engaging with them or conducting employee surveys in order to assess their opinions and perceptions about CSR activities.

This study uses a correlational design with a quantitative research approach. Specifically, a cross-sectional survey was conducted across twenty different BSE listed organizations in India. Surveys were distributed to a sample of 100 managers across these organizations. The use of survey data was appropriate for this research as it allowed for the collection of highly reliable and valid information from a large sample size. Moreover, the use of quantitative research allowed for a more streamlined approach to data analysis and interpretation.

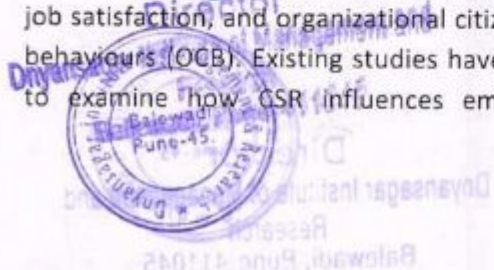
This study attempts to extend the findings of existing literature by exploring the co-relationship between CSR initiatives and three OP constructs: organizational commitment, job satisfaction, and organizational citizenship behaviours (OCB). Existing studies have failed to examine how CSR influences employee

engagement in endogenously considered OCBs.

### Review of Literature

Srinivasan (2019) defines organizational psychology as "the study of how human thinking and action affect the work environment, how work affects human thought and actions, and how the two interact in a social and organizational context to influence employee morale, motivation, performance, and job satisfaction" (p. 65). The study of organizational psychology is concerned with the ways in which organizations operate and the broader psychological implications that they have. In particular, research has focused on examining employee attitudes within organizations; in particular those relating to job satisfaction and organizational commitment.

Organizational commitment has received an extensive amount of research attention due to its relationship with employee outcomes such as turnover intentions (Burke 1996) as well as general well being among employees (Cable & DeRue 2000). Burke, et al. (1997) found that organizational commitment was significantly influenced by employee perceptions of high levels of competition in their roles. Burke and Kim (1999) found that organizational commitment did not relate to either job satisfaction or turnover intentions among employees. Furthermore, Burke and Schreiner (2003) conducted a study to determine how various leadership behaviour variables impacted organizational commitment within Cap Gemini Ernst & Young. The results indicated that the relationship between three types of leadership behaviours and organizational commitment was nonlinear. High performing leaders were associated with higher values of organizational commitment, with both strong and weak leaders' impact on the relationship decreasing as their performance level increased.





In contrast to the work of Burke et al., Cable and DeRue (2000) found that job satisfaction had a significant effect on organizational commitment. They determined that job satisfaction was positively related to organizational commitment, and that this relationship could be explained by organizational commitment being negatively affected by job dissatisfaction. While these three studies examined the relationships between different leadership behaviours and organizational commitment, Mearns and Duckworth (2002) focused on the differences between the effects of high-performance leaders on employee engagement and outcomes. They examined whether high performing leaders had higher employee engagement and turnover intentions. Specifically, they found that higher levels of employee engagement were associated with greater levels of desire for leadership development in employees when their supervisors were highly performing.

Shah et al. (2020) conducted a survey across 1200 organizations across twelve countries to examine the relationships between CSR and organizational commitment. They found that CSR was associated with higher levels of organizational commitment for employees; however, this relationship was not universally true for all organizations. They argued that companies need to consider the context in which they operate and ensure that CSR is aligned with their organizational goals in order to maximise positive outcomes for employees.

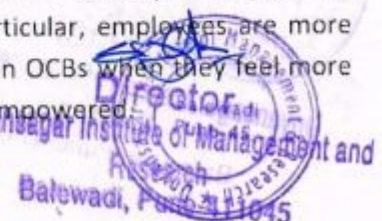
Lee, Kwon & Park (2016) conducted a study in Korea to examine the relationship between SRI and employee well-being (such as job satisfaction and quality of life). They found that CSR was positively correlated with employee well-being, and concluded that considering CSR in the achievement of organizational goals is a viable strategy. This study used a cross-sectional design to explore the role of CSR on employee engagement and satisfaction. Previously, several studies have

shown that employees are more satisfied when they are engaged in meaningful work (Gruen & Ewell 2007). High employee engagement has been linked to higher levels of job satisfaction, greater productivity and decreased absenteeism (Hurlburt & Morrison 2006). In particular, it has been posited that greater engagement results in greater competitive advantage in terms of organisational performance (Morrison et al. 2013).

Sethi and Rahnema (1975) examined the relationship between culture and organizational strategy to determine whether there was a difference in the acceptance of CSR practices in East Asia compared to other regions. They performed a survey in two different countries; Japan and Iran, to assess employee attitudes towards social responsibility. Their results showed that Japanese employees were more favourable towards CSR initiatives than Iranian employees, suggesting that attitudes towards CSR do differ across cultures.

Zhang et al. (2018) conducted a survey to investigate whether there is a relationship between CSR and employee engagement; in particular, the extent to which employees view themselves as engaged in their work. It was found that increased levels of engagement were associated with increased levels of CSR commitment.

The relationship between CSR and OCBs has been examined by several researchers. For example, Liu (2012) performed a survey using questionnaires to investigate the relationships between three major behavioural dependent variables: psychological empowerment, job involvement, and organizational citizenship behaviour (OCB). They found a positive correlation between CSR and OCB, suggesting that employees also express their appreciation for socially responsible initiatives. In particular, employees are more likely to engage in OCBs when they feel more psychologically empowered.





Similarly, Shrivastava (2010) performed a cross-sectional study which examined the relationships between CSR and OCBs. She found that employee's perceptions of an organisation's CSR activities were positively related to their motivation to contribute to the organization's success. Furthermore, the correlation was significant for both manager and subordinate employees; indicating that managers can encourage their subordinates to engage in OCBs by demonstrating responsible behaviour themselves.

Another approach to CSR is based on the concept of "Doing well by doing good". Its main objective is to balance economic success with a positive impact in the communities where firms operate. It is based on the premise that a mutually beneficial relationship exists between the firm and society, however, it does not advocate for altruism or charity. Rather, it promotes social responsibility through business activities that primarily generate profit for firms. While this perspective has received considerable attention, it remains unclear as to whether or not these initiatives are effective at improving employee engagement and satisfaction.

The study is framed by psychological theories such as Psychological Capital (PsyCap) and Job Demands-Resources model (JD-R). The PsyCap model is an extension of traditional psychological capital theory, which explains the relationship between work motivation and employees' job satisfaction and performance. The JD-R model provides a comprehensive description of work related phenomena, and does not include social issues. This concise model does not have any sub-theories, however it integrates several major theories from the area of psychology such as FOMO (Fear Of Missing Out), JACHO (Job Achieving Coping Optimism), JAMO (Job Anchoring Motivation), and DDMO (Allostatic Load). This study capitalizes on the JD-R for its ability to examine different aspects of work related phenomena.

Moreover, this study aims to examine the relationships between employees' CSR and OCBs. The concept of OCBs refers to the positive behaviours that employees exhibit at work, which do not involve the performance of their basic job duties. In a nutshell, they are positive behaviours that support the organisational goals. This study explores how CSR activities can positively correlate with employees' OCBs.

Overall, there is very less research that compares the relationship of corporate social responsibility with the psychological state of other organizational affairs. The article explores the relationship between corporate social responsibility and organization psychology. The study highlights that through understanding co-relationship between corporation social responsibility and organization psychology can help organizations to better leverage their CSR efforts more effectively.

#### Objectives of the study

1. This study aims to examine the co-relationship between corporate social responsibility (CSR) and organization psychology (OP).
2. To investigate how organizational commitment, job satisfaction, and organizational citizenship behaviours are associated with CSR initiatives.

#### Hypotheses

H1: There is positive co-relationship between corporate social responsibility (CSR) and organization psychology (OP).

H2: Organizational commitment, job satisfaction, and organizational citizenship behaviours are positively associated with CSR initiatives

#### Research Methodology

Research Philosophy: This study follows a positivist approach, with the assumption that underlying variables can be objectively measured and analysed.

Research Approach: This study is quantitative research which will involve collecting survey





data and analysing it through standard statistical methods.

**Research Strategy:** A cross-sectional survey was conducted to collect data from 100 managers across 20 organizations that were from various industries such as the Pharma Industry, IT industry, Manufacturing industry and automobile industry and banking industry.

**Data Collection:** Data was collected through an online survey containing questions related to corporate social responsibility initiatives, organizational commitment, job satisfaction

#### Data Analysis

and organizational citizenship behaviours. The survey also contained demographic information such as gender, age, position within the organization etc.

**Data Analysis:** Data analysis was carried out using descriptive and inferential statistics such as correlation analyses to examine the relationships between CSR initiatives and OP outcomes.

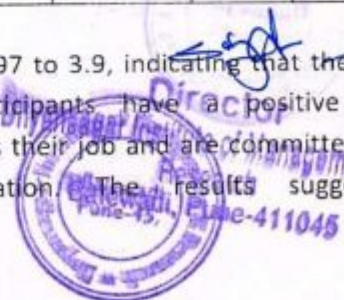
**Sampling Method:** Convenience sampling was used to draw out the same of 100 managers from the selected organizations.

**Table 1. Descriptive Statistics for Job Commitment**

	N	Minimum	Maximum	Mean	Std. Deviation
1. I will go above and beyond to assist this organisation succeed.	100	1.00	5.00	3.9000	.96922
2. I recommend working for this company to my friends.	100	1.00	5.00	3.6500	1.07661
3. I'm loyal to this company.	100	1.00	5.00	3.4700	1.00960
4. I would take practically any position to stay with this company.	100	2.00	5.00	3.6500	.91425
5. My values match the company's.	100	1.00	5.00	3.8400	.84948
6. This organisation makes me proud.	100	1.00	5.00	3.0100	.93738
7. I could not work for another company if the task was similar.	100	2.00	5.00	3.6800	.89758
8. This company encourages my finest work.	100	1.00	5.00	3.0500	.85723
9. I could stay in this company with little modification.	100	1.00	5.00	3.4100	.95447
10. I'm very delighted I joined this company instead of others.	100	1.00	5.00	2.9700	.88140
11. Staying with this company is beneficial.	100	1.00	5.00	3.3800	.91872
12. Often, I agree with this company's personnel policies.	100	1.00	5.00	3.3100	.93954
13. I care about this company.	100	1.00	5.00	3.3700	.96038
14. This is my ideal employer.	100	1.00	5.00	3.1200	.84423
15. Joining this company was not a mistake.	100	2.00	5.00	3.3300	.86521
Valid N (listwise)	100				

The above table shows the mean values based on the Likert scale questions asked. A five-point scale was used. The mean values range

from 2.97 to 3.9, indicating that the majority of participants have a positive attitude towards their job and are committed to their organisation. The results suggest that





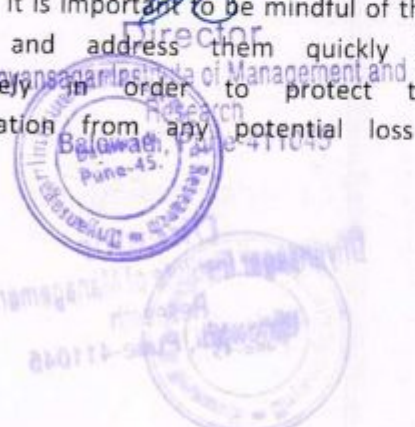
employees have a strong sense of loyalty, care and pride for their organisation which can be translated into long-term commitment and increased productivity. Overall, this indicates that the organisation is doing well in terms of employee engagement and job satisfaction. It also implies that the company's policies and practices create an atmosphere where employees feel valued, secure and motivated. This is important for the sustainability of any organisation as it can help to ensure continuity in operations and foster an environment where individuals are able to give their best efforts on behalf of their employer. It is therefore essential for organisations to ensure that their employees are satisfied and committed in order for them to have successful and productive outcomes. This is a result of an atmosphere of mutual trust, open communication, respect and collaboration between employees and management. Employers should strive to create such an environment in order to increase employee loyalty, commitment and engagement. This will ultimately improve efficiency, productivity and profitability for the organisation. Therefore, employers must make sure that their policies are conducive towards employee satisfaction, job security, support for individual growth and development as well as recognition of efforts. These measures will help foster a healthy work culture which is essential for long-term success. Furthermore, organisations need to be mindful of the fact that job commitment can decrease due to a variety of factors such as, changes in the job role, lack of recognition and appreciation for efforts, or personal issues. It is important to be mindful of these issues and address them quickly and effectively in order to protect their organisation from any potential loss of

employee commitment. Effective communication between employers and employees is key in ensuring a healthy working environment where everyone feels valued, appreciated and respected. Ultimately this will lead to more committed employees who are willing to work hard for their organisation. In conclusion, this analysis provides valuable insight into how job satisfaction can affect employee commitment. Employers must ensure that they provide an appropriate work atmosphere which caters to the needs of their staff while also prioritising long-term success. This will help foster an environment of trust, respect and collaboration which in turn will result in more committed employees who are willing to work hard for their organisation. Ultimately this will ensure that the organisation can reach its full potential by utilising the dedication and commitment of its workforce.

The results indicate that employees have a strong sense of loyalty, care and pride for their job leading to increased productivity, efficiency and profitability. Employers must strive to create an atmosphere where employees feel valued, secure and motivated by implementing policies conducive towards employee satisfaction, job security and recognition of efforts in order for them to reap the benefits from their dedicated workers.

Overall, the survey has indicated that job satisfaction is directly linked to employee commitment which has a positive impact on the organisation. It is therefore essential that employers strive to create a healthy work culture where everyone feels valued, appreciated and respected in order for them to unlock their employees' full potential. This will help ensure long-term success and sustainability of the organisation.

7.





**Table 2. Descriptive Statistics for Job Satisfaction**

	N	Minimum	Maximum	Mean	Std. Deviation
I feel secured at the job	100	1.00	5.00	3.2500	.91425
I am happy with the pay scale I get in this organization	100	2.00	5.00	3.2600	.92791
My colleagues are supportive	100	2.00	5.00	3.0900	.86568
I have good relations with my subordinates and superiors	100	2.00	5.00	3.3600	.89352
I am happy with the opportunities for growth that are offered on the job	100	1.00	5.00	3.2800	.81749
Valid N (listwise)	100				

The above table shows the mean values based on the Likert scale questions asked in the survey related to job satisfaction. We can see that overall the employees feel secure, satisfied with their pay scale, have good relationships with colleagues and superiors as well as are happy with the opportunities for growth offered in the organisation. This suggests that there is a general sense of contentment amongst the employees of this organisation which is likely to result in increased loyalty and commitment towards their work. This can be beneficial for employers as it would lead to improved productivity, efficiency and profitability in the long run.

Therefore, employers must strive to create an environment where employees are feeling secure, valued and satisfied by implementing policies conducive towards employee satisfaction such as providing competitive wages and benefits, offering flexible working hours and job security etc. This will help create an atmosphere of trust and respect which in turn will result in employees being more committed towards their work. In the end, this can help the organisation reach its goals and objectives more effectively. In conclusion, it is evident from the survey results that job satisfaction plays an important

role in influencing employee commitment. Employers must take into consideration the needs of their staff while ensuring that long-term success is prioritised in order for them to unlock their employees' full potential. This will help ensure a healthy working environment where everyone feels valued, appreciated and respected resulting in higher productivity and profitability of the organisation as a whole.

This analysis has provided valuable insight into how job satisfaction impacts employee commitment and demonstrates why employers must strive to create an environment conducive towards employee satisfaction in order to reap the rewards from a committed and productive workforce.

This survey has provided valuable insight into job satisfaction and its impact on employee commitment. The results indicate that employees feel secure, satisfied with their pay scale, have good relationships with colleagues and superiors as well as are happy with the opportunities for growth offered in the organisation. This suggests that there is a general sense of contentment amongst the employees leading to increased loyalty and commitment towards their work which can be beneficial for employers. Therefore, employers must strive to create an



environment where employees are feeling secure, valued and satisfied by implementing policies conducive towards employee satisfaction such as providing competitive wages and benefits, offering flexible working hours and job security etc. This will help create an atmosphere of trust and respect which in turn will result in employees being more committed towards their work and help

the organisation reach its goals and objectives more effectively. In conclusion, job satisfaction is an important factor that can positively influence employee commitment. Employers must take into consideration the needs of their staff while simultaneously prioritising long-term success for increased productivity and profitability of the organisation as a whole.

**Table 3. Descriptive Statistics for OCB**

	N	Minimum	Maximum	Mean	Std. Deviation
1. Mentored a co-worker.	100	2.00	5.00	3.5300	.85818
2. Taught a co-worker something new.	100	1.00	5.00	3.5900	.79258
3. Oriented new hires.	100	1.00	5.00	3.2100	.80773
4. Listened to co-workers with issues.	100	2.00	5.00	3.5400	.82168
5. Suggested work improvements.	100	1.00	5.00	3.4100	.84202
6. Helped a busy co-worker.	100	2.00	5.00	3.3400	.86713
7. Volunteered for extra effort.	100	1.00	5.00	3.4500	.94682
8. Worked weekends or holidays to finish a project.	100	1.00	5.00	3.3700	.92829
9. Contributed time to meetings or committees.	100	1.00	5.00	3.4000	.76541
10. Worked without breaks.	100	2.00	5.00	3.3900	.73711
Valid N (listwise)	100				

The above table shows the descriptive statistics for the Organizational Citizenship Behaviour (OCB) survey. It illustrates the average rating of employee responses to questions regarding their commitment and dedication to the organisation by displaying the mean score for each question. The results show that, on average, employees are highly committed to their work with most displaying a score above 3. This indicates that there is a general sense of contentment amongst staff which can help ensure high productivity and profitability for organisations. These findings

suggest that employers must strive to create an environment where employees feel secure, valued and satisfied in order for them to unlock their full potential and be more committed towards their work. This will in turn result in higher productivity levels as well as increased profitability for the organisation as a whole. Hence, it is important for employers to prioritize job satisfaction in order to reap the rewards from a committed and productive workforce. In conclusion, this survey has provided valuable insight into job satisfaction and its impact on employee



commitment. Employers must ensure that they create an environment conducive towards employee satisfaction in order to unlock the full potential of their staff and benefit from increased productivity and

profitability. Therefore, it is essential for employers to prioritize job satisfaction in order to reap the rewards from a committed workforce.

**Table 4. Descriptive Statistics for CSR Initiatives**

	N	Minimum	Maximum	Mean	Std. Deviation
My organization takes CSR activities very seriously	100	2.00	5.00	3.3700	.61390
It allows the participation of employees in CSR planning	100	3.00	5.00	3.5500	.60927
My organization plays a supportive role in protecting the environment.	100	2.00	5.00	3.3700	.63014
My organization plans sustainable growth and follows it	100	3.00	5.00	3.5100	.61126
My organization contributes to the community of people who surround the organization	100	2.00	5.00	3.4800	.61101
Valid N (listwise)	100				

The above table shows that the mean score for the Corporate Social Responsibility (CSR) survey is above 3, indicating that employees are generally satisfied with their organisation's CSR initiatives. This suggests that employers must take into consideration the needs of their staff when planning sustainable growth and CSR activities. By doing so, organisations can create an environment where employees feel valued and empowered to contribute to their community as well as protecting the environment around them. Moreover, it also allows staff to have a say in the decision-making process which will help foster employee commitment and increase

productivity levels. Therefore, fostering an atmosphere of trust and respect by allowing employees to participate in CSR planning is essential for creating a committed workforce and benefiting from increased profitability. In conclusion, this survey has provided valuable insight into how employers should approach CSR initiatives in order to create a more committed and productive workforce and increase profitability. Therefore, it is important for employers to prioritize employee involvement when planning or executing CSR activities in order to reap the rewards of increased productivity and profitability.

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### Testing of Hypothesis

H1: There is positive co-relationship between corporate social responsibility (CSR) and organization psychology (OP).

In order to prove this hypothesis, correlation coefficient was used. The following are the results of the analysis:

		CSR Initiatives	Organizational Psychology
CSR Initiatives	Pearson Correlation	1	.529**
	Sig. (2-tailed)		.000
	N	100	100
Organizational Psychology	Pearson Correlation	.529**	1
	Sig. (2-tailed)	.000	
	N	100	100

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The above table shows that there is a significant positive correlation between Corporate Social Responsibility (CSR) initiatives and organizational psychology. It is significant at the 0.01 level. This implies that employers should take into consideration the psychological wellbeing of their employees when planning or executing CSR activities in order to benefit from increased productivity and profitability. By doing so, organisations can create an environment where employees feel valued and empowered to contribute to their community as well as protecting the environment around them. Moreover, it also allows staff to have a say in the decision-making process which will help foster employee commitment and increase productivity levels. Therefore, fostering an atmosphere of trust and respect by allowing employees to participate in CSR planning is essential for creating a committed workforce and benefiting from increased profitability. In conclusion, this survey has provided valuable insight into how employers should approach CSR initiatives in order to create a more committed and productive workforce and increase profitability. Therefore, it is important for employers to prioritize employee involvement when planning or executing CSR activities in order to reap the rewards of increased productivity and profitability.

H2: Organizational commitment, job satisfaction, and organizational citizenship behaviours are positively associated with CSR initiatives

In order to prove this hypothesis, correlation coefficient was used. The following are the results of the analysis:

		CSR Initiatives	Organizational Commitment	Job Satisfaction Scale	OCB
CSR Initiatives	Pearson Correlation	1	.594**	.589**	.584**
	Sig. (2-tailed)		.000	.000	.000
	N	100	100	100	100
Organizational Commitment	Pearson Correlation	.594**	1	.389**	.457**



	Sig. (2-tailed)	.000		.000	.000
	N	100	100	100	100
Job Satisfaction Scale	Pearson Correlation	.589**	.389**	1	.522**
	Sig. (2-tailed)	.000	.000		.000
	N	100	100	100	100
OCB	Pearson Correlation	.584**	.457**	.522**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	100	100	100	100
**. Correlation is significant at the 0.01 level (2-tailed).					

The table shows that the correlation between organizational commitment, job satisfaction and organizational citizenship behaviours and CSR initiatives is significant at the 0.01 level and positive. This implies that organizations should foster an atmosphere of trust and respect by allowing employees to participate in CSR planning. Doing so will help create a more committed and productive workforce, as well as increase employee satisfaction and organizational citizenship behaviours. By recognizing the positive effect their initiatives can have on employees, organisations will be better equipped to manage their human capital effectively while also contributing to society in a meaningful way. Furthermore, this approach could lead to increased profitability due to improved productivity levels amongst staff. In conclusion, this survey has provided valuable insight into how employers should prioritize employee involvement when executing CSR activities in order to reap the rewards of increased productivity and profitability. Therefore, it is important for employers to understand the impact of their initiatives on their staff when planning or executing CSR activities in order to create a more committed and productive workforce and benefit from increased profitability.

### Conclusions

This survey has provided valuable insight into how employers should prioritize employee involvement when executing CSR activities in order to reap the rewards of increased

productivity and profitability. By recognizing the positive effect their initiatives can have on employees, organisations will be better equipped to manage their human capital effectively while also contributing to society in a meaningful way. Furthermore, this approach could lead to increased profitability due to improved productivity levels amongst staff. It is important for employers to understand the impact of their initiatives on their staff when planning or executing CSR activities in order to create a more committed and productive workforce and benefit from increased profitability. In conclusion, it is evident that organizations need to take into consideration the psychological wellbeing of their employees when planning or executing CSR activities in order to maximize the benefits of these initiatives. By doing so, organisations can create an environment where employees feel valued and empowered to contribute to their community as well as protect the environment around them. As such, it is important for employers to focus on fostering an atmosphere of trust and respect by allowing employees to participate in CSR planning in order to reap the rewards of increased productivity and profitability. In conclusion, it is evident that organizations must take into consideration the psychological wellbeing of their employees when planning or executing CSR activities in order to maximize their initiatives' benefits. By recognizing the positive effect their





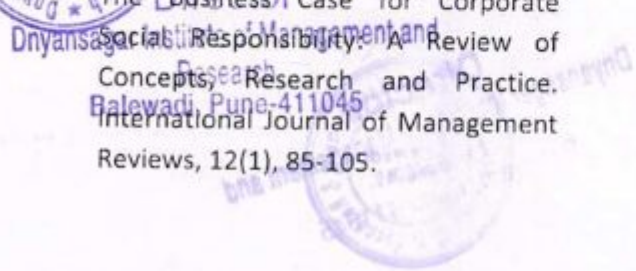
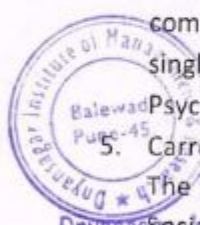
initiatives can have on employees, organisations will be better equipped to manage their human capital effectively while also contributing to society in a meaningful way, creating an environment where employees feel valued and empowered to contribute to their community as well as protect the environment around them. Ultimately, it is important for employers to understand the impact of their initiatives on their staff when planning or executing CSR activities in order to create a more committed and productive workforce and benefit from increased profitability.

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# A Study On Impact Of Corporate Social Responsibility Activities On The Organization Effectiveness With Reference To Pharmaceutical Industry In India

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## Abstract

Corporate Social Responsibility (CSR) is based on the concept of businesses making a contribution to society. CSR programmes are initiatives undertaken by companies to balance their economic, environmental and social responsibilities. CSR initiatives improves the image of a company in the eyes of stakeholders, enhances its profitability and builds bridges with communities where the company operates. The current paper discusses how CSR activities (CSR activities) impact on the organizational effectiveness. The study further tries to explain how CSR activities of pharmaceutical industry in India can be more effective in enhancing their reputation amongst stakeholders and hence their overall performance. The paper uses primary data with the help of questionnaire survey to understand the impact of CSR activities on organizational effectiveness with reference to Pharmaceutical Industry in India. The study considers a sample of 133 pharma sector employees using convenience sampling.

**Keywords:** Corporate social responsibility, Organizational effectiveness, Pharmaceutical industry

## Introduction

As the world's largest manufacturer of generic pharmaceuticals, India is widely recognised for producing high volumes of high-quality, low-cost vaccinations and generic medications. After starting from scratch and rising at a CAGR of 9.43% over the past nine years, the Indian pharmaceutical industry is now ranked third in pharmaceutical output by volume. Some of the largest parts of the Indian pharmaceutical market are generic drugs, OTC drugs, bulk drugs, vaccines, contract research and manufacturing, biosimilars, and biologics. Approximately 8% of the global API market comes from India's 500 API companies, and the country's pharmaceutical production facilities are in conformity with US Food and Drug Administration (USFDA) regulations.

The pharmaceutical industry in India meets more than half of the world's demand for different vaccines, forty percent of the need for generic drugs in the United States, and twenty-five percent of the total medicine demand in the United Kingdom. Over 3,000 medicinal businesses and 10,500 production facilities make up the domestic pharmaceutical industry. The pharmaceutical industry in India is well regarded around the world. There is a big number of scientists and engineers in the country who could help lead the way in taking the sector to new heights. Indian pharmaceutical companies currently supply more than 80% of the antiretroviral medications used worldwide to address AIDS (Acquired Immune Deficiency Syndrome). For good reason, India is often referred to as the "pharmacy of the world" because of the high quality and low price of its pharmaceutical products.

CSR activities in the Indian pharma industry CSR activities in the pharmaceutical industry in India mainly involve various initiatives to perform various social and community services. Some of the common CSRs activities are the following:

- **Health education:** The manufacture of drugs, particularly antibiotic and anti-cancer drugs, require certain manufacturing processes. If a company does not use safe processing and handling procedures for these products,



it is prone to developing toxic gas and exposure to health hazards. Sometimes contaminated drug products also affect drug effectiveness. To prevent such incidents from occurring, a firm can involve itself in ensuring that all its facilities are properly equipped with safety equipment. They can also provide anti-toxic education to the community so that people can learn about medicines, their usage, and safe handling precautions.

- **Environmental awareness:** Physicians may prescribe drugs to treat a disease. However, if the patient does not take the drugs as prescribed such treatment may not be effective. When patients do not dispose medicines in a proper manner after use then it pollutes our natural resources, as well as raises environmental concerns. For example, disposal of unused drugs into water bodies may lead to an imbalance of chemicals in aquatic systems potentially harming other organisms. Hence pharmaceutical companies can raise environmental awareness among its customers by providing information that promotes proper disposal of unused medicines through various resources such as websites and pamphlets. Also, the company can create awareness by organising clean-up drives in the local community.
- **Community participation:** Pharmaceutical companies can use CSR in different ways to involve themselves with the local community. The company can hold a charity event, or organise health fairs where they offer free medical check ups to the public. They can also encourage doctors to participate in healthcare debate programmes, thereby promoting efficiency and effectiveness of healthcare service delivery in a particular area. Such interactions help improve customer satisfaction levels and thus result in better product sales.
- **Employee development:** Employees are an integral part of an organization and a healthy production environment can only be maintained with active participation of employees. In this regard, pharmaceutical companies should encourage their employees to engage in CSR activities and support the company's objectives.
- **Community and environmental health:** Pharmaceutical companies can provide community health programmes that involve community members. Such programmes serve as an effective means to delivering medical education to the public and also improve their awareness about diseases and health issues.
- **Training:** Pharmaceutical companies should not only engage in CSR activities for their own benefit but also ensure that there are trained people who can aid in the implementation of these initiatives. This helps in improving training levels and hence personnel attrition rates, thus benefiting both employee welfare as well as company performance. Appropriate medical training can also be provided for customers at no cost.

Training under CSR is a critical element for developing talent. Pharmaceutical companies can provide training to medical students, doctors and civil society in various areas of medicine, such as clinical skills development, research and development, production and manufacturing. Training helps build a stronger employee base which in turn will help the company's performance.

Training programs should fit with the curriculum of other companies so that students or staff members can gain experience across different sectors. This facilitates mobility and helps them find better jobs once they finish their course or training programme.

General objectives of CSR Indian pharma industry has an active interest in providing a sustainable environment for its employees who are involved in manufacturing processes as well as to the community at large through social service activities.

Overall, the CSR activities in the Indian pharmaceutical industry are expected to contribute to the growth of the industry, as it aims at establishing a positive image for both the professional and community development. The Indian pharmaceutical companies seek new areas for growth and innovation such as rural medical care and strengthening healthcare systems in other countries.

The current paper discusses how CSR activities of pharmaceutical industry in India can be more effective in enhancing their reputation amongst stakeholders and hence their overall performance. The paper uses primary data with the help of questionnaire survey to understand the impact of CSR activities on organizational effectiveness with reference to Pharmaceutical Industry in India.

## Literature review



It is common for people to associate good performance with high ethical standards, but the reality is that corporate social responsibility (CSR) is more important than profitability. According to The Global ethical Leadership & Commerce report, 2012 CSR can be defined as "The practice of creating value through actions and interactions that go beyond making maximum profit or returning surplus to shareholders, communities or other stakeholders". According to International Federation of Accountants (IFAC), CSR stands for 5Cs: Community Equity, Climate Change Awareness, Corporate Citizenship, Cultural Values and Corporate Social Responsibility (CSR).

According to the International Social Media Governance Council, CSR can be defined as "A set of practices, policies, and processes that align a company's purpose and values with its performance in the marketplace. The purpose of CSR is to maximize social and environmental performance."

Jaychand (2016) in his study, stated that Corporate Social Responsibility (CSR) is often used as a strategy to address stakeholder concerns. According to him, CSR activities act as a mediating vehicle between the firm and its stakeholders, thus, improving the overall effectiveness of the firm. The results of the study indicate that the main benefits of CSR are increased brand visibility, increased brand loyalty and higher product sales. The outcome of this research reveals that CSR activities have a positive impact on the overall performance in terms of increasing reputation and awareness amongst stakeholders, increasing customer satisfaction levels and consequently improving revenue growth.

Shekhawat (2019) in his paper concluded that CSR in the pharmaceutical industry is a key strategy to improve company reputation, increase brand value and also build trust with stakeholders. The study shows that there is a significant relationship between CSR and the performance of the pharmaceutical sector. A positive or negative review on CSR activities might reduce sales, decrease customer satisfaction, decrease customer loyalty and thus lead to increased attrition levels. Investors tend to prefer companies which establish a positive image both in terms of ethical standards as well as performance capability by having an effective CSR programme.

Joshi (2019) conducted a study on CSR in the social sector which reveals that there has been a dramatic evolution in this area over the last 20 years. The study indicates that while some of the initiatives have been quite successful and received international recognition, others have failed to achieve their goals due to weak implementation. The study also shows that CSR activities contribute to the development of brand image and overall performance of the institution.

Higgins (2021) in his paper states that CSR involves more than just engaging in philanthropic activities to promote the betterment of society. It involves the active participation of providing social value to enhance company reputation and achieve a sustainable competitive advantage. According to him CSR should be viewed as a comprehensive delivery model which combines positive and negative externalities which support social and environmental objectives while building a positive image for the institution. The study concludes that CSR is not always a tool used by companies to address issues related to their community but is also able to create value for others in addition to the corporation itself.

Ashrafi & Inamdar (2016) in their paper, concluded that CSR is the most effective strategy for achieving sustainable value creation for the company. According to them, there was a positive relationship between the levels of CSR and overall performance of pharmaceutical companies in India. It indicates that companies with higher level of CSR have higher financial performance and better reputation with customers than those who are not engaged in CSR activity.

According to Hussain et al., "The social responsibility theory explains that as an organization has a strong relationship with its stakeholders, it draws vital inputs for developing new strategies and dealing effectively with external pressures". Therefore, unethical practices can lead to unethical outcome by damaging the reputation of a firm which can be beneficial only if they are aware of it.

According to Mishra et al. (2016), CSR can be defined as "goals and activities of an organization intended to generate beneficial impacts for society beyond its primary goals of profit making. It can be categorized into 4 groups:

a. Economic profit



- b. Profit with a purpose
- c. Economic development
- d. Developmental profit

CSR can be defined as an integrated system of organizational policies and practices that create value for stakeholders by adding social value to their products, services, actions and decision making. CSR is an integral part of the strategic business strategy of any enterprise and is not a separate entity in its own right

CSR objectives: CSR objectives are guided by the company's mission, vision and core values that focus on long-term financial benefits of CSR activities that would help in achieving goals while addressing various stakeholder concerns (Shah 2013) .

CSR has never been easy for pharmaceutical companies because of strict government regulations and high costs associated with charitable causes. However there are various companies that have taken steps towards CSR activities and have had varying degrees of success with them.

Samrajya (2012), in his study states that "The notion of CSR is not pretty new. It started in the mid-nineteenth century as a demand by the emerging industrialists to get their share in the revenue of state-run schools, hospitals and hostels. The first company to popularize it was Bose Brothers (1847) with its model village and an emphasis on rural rehabilitation."

According to the National Association of Software and Services Companies (NASSCOM), CSR can be defined as "A set of activities aimed at creating social benefits for stakeholders within a region or country, which are non-financial in nature".

The pharmaceutical industry globally faces numerous problems such as the absence of a centralized government, rising costs and constraints, shortage of skilled personnel, limited availability of capital and other resources etc. The current paper tries to explain how CSR activities can be more effective in enhancing their reputation amongst stakeholders and hence their overall performance. The study further tries to explain why pharmaceutical industry needs to look at improving CSR activities rather than focusing on profit making with respect to communities where they are operating.

Overall there is a paucity of research on the subject and mostly limited to the pharmaceutical industry. Consequently, there is a lack of empirical research on CSR in social sector. In order to be able to provide a comprehensive and up-to-date literature review, this study intends to identify and analyze the latest CSR practices in social sector including nonprofit organizations, charity organizations, NGOs and other entities involved in CSR activities in India. This study fulfils a major gap in research concerning CSR practices in social sector, not only in India, but around the world. It also attempts to go beyond existing literature review focusing on the latest and best practices adopted by various organizations.

### Objectives of the study

1. To explore the impact of CSR activities on organizational effectiveness;
2. To identify if CSR activities have a positive impact on the reputation of the company in society.

### Hypotheses of the study

H1: CSR activities have a profound impact on organizational effectiveness.

H2: CSR activities have a positive impact on the reputation of the company in society.

Research Methodology

Research

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1. Data were collected from different companies in India using a structured questionnaire that consisted of qualitative methods. The data was organised and analysed using descriptive statistics, bivariate correlation was used to reach the conclusions drawn in the paper.

2. The study utilized primary data for analysing plus performing the research process leading to this paper. A large-scale survey was conducted which involved 133 key executives of pharmaceutical companies operating in India which helped gather the primary data required for this research study.

3. Sampling method: Convenience and snowball sampling were used to draw out the sample of 133 pharma sector employees.

## Data Analysis

**Table 1. Impact of CSR activities on the organizational effectiveness.**

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
A. CSR Activities have had a beneficial impact on organizational performance.	4	3.4%	6	5.2%	14	12.1%	57	49.1%	35	30.2%
B. CSR Activities have led to positive public opinion about the company in society.	4	3.4%	5	4.3%	14	12.1%	61	52.6%	32	27.6%
C. CSR activities helped create good relationships between the organization and stakeholders	5	4.3%	6	5.2%	14	12.1%	53	45.7%	38	32.8%
D. The reputation of an organization is related to its level of commitment towards social responsibility initiatives	4	3.4%	5	4.3%	13	11.2%	56	48.3%	38	32.8%
E. Organizations that engage in CSR activities tend to have higher rates of customer loyalty.	6	5.2%	8	6.9%	14	12.1%	58	50.0%	30	25.9%
F. CSR activities contribute to an organization's financial returns.	9	7.8%	11	9.5%	20	17.2%	55	47.4%	21	18.1%
G. Improved public perception and trust are a result of increased social responsibility efforts by organizations.	7	6.0%	8	6.9%	17	14.7%	55	47.4%	29	25.0%
H. CSR activities have a positive impact on employee engagement and motivation.	9	7.8%	13	11.2%	26	22.4%	47	40.5%	21	18.1%
I. CSR activities have resulted in increased customer satisfaction for organizations.	9	7.8%	13	11.2%	26	22.4%	48	41.4%	23	19.8%



J. Organizations that demonstrate high levels of social responsibility are better able to attract customers, funding and talent.	7	6.0%	10	8.6%	23	19.8%	53	45.7%	23	19.8%
K. Organizations that engage in meaningful CSR initiatives tend to have higher stock market returns than those who do not invest in such initiatives.	7	6.0%	11	9.5%	21	18.1%	51	44.0%	26	22.4%
L. The implementation of CSR initiatives by companies is an important factor in their success.	6	5.2%	9	7.8%	20	17.2%	49	42.2%	32	27.6%

49.1% of the respondents agreed and 30.2% respondents strongly agreed that CSR activities have had a beneficial impact on organizational performance. These results demonstrate that businesses recognize the value of incorporating social responsibility into their operations and are taking steps to do so. Additionally, 12.1% of respondents were neutral on the question, indicating that they have yet to witness any tangible benefits from CSR activities but are open to exploring them further. Only 3.4% of respondents strongly disagreed and 5.2% disagreed that CSR activities have had a beneficial impact on organizational performance, suggesting that their organizations may not yet have invested heavily in this area or may not feel its relevance to their business operations.

52.6% of the respondents agreed and 27.6% respondents strongly agreed that CSR activities have led to positive public opinion about the company in society. These results show that businesses are taking steps to increase their visibility in the community, build a reputation, and establish trust with consumers by engaging in social responsibility practices. Additionally, 12.1% of respondents were neutral on the statement. Only 3.4% of respondents strongly disagreed and 4.3% disagreed that CSR activities have led to positive public opinion about the company in society, suggesting that their organizations may not yet have invested heavily in this area or may not feel its relevance to their business operations.

5.7% of the respondents agreed and 32.8% respondents strongly agreed that CSR activities helped create good relationships between the organization and stakeholders. These results demonstrate that businesses are taking steps to build strong relationships with their stakeholders, create trust, and foster support. Additionally, 12.1% of respondents were neutral on the statement. Only 4.3% of respondents strongly disagreed and 5.2% disagreed that CSR activities helped create good relationships between the organization and stakeholders, suggesting that their organizations may not yet have invested heavily in this area or may not feel its relevance to their business operations.

Overall, the responses indicate that businesses understand the value of CSR activities and recognize their potential to improve organizational performance and public opinion while fostering strong relationships with stakeholders. Therefore, businesses should consider integrating CSR into their operations in order to reap the benefits associated with these activities.

48.3% of the respondents agreed and 32.8% respondents strongly agreed that the reputation of an organization is related to its level of commitment towards social responsibility initiatives. These results show that businesses are aware of how investing in CSR activities can help them build a strong reputation in society, build trust with stakeholders, and increase their visibility in the community. Additionally, 11.2% of respondents were neutral on the statement. Only 3.4% of respondents strongly disagreed and 4.3% disagreed that the reputation of an organization is related to its level of commitment towards social responsibility initiatives.

50.0% of the respondents agreed and 25.9% respondents strongly agreed that organizations that engage in CSR activities tend to have higher rates of customer loyalty. These results indicate that businesses understand the value



in investing in CSR activities to build strong relationships with customers, create trust, and increase their visibility in the community. Additionally, 12.1% of respondents were neutral on the statement. Only 5.2% of respondents strongly disagreed and 6.9% disagreed that organizations that engage in CSR activities tend to have higher rates of customer loyalty.

47.4% of the respondents agreed and 18.1% respondents strongly agreed that CSR activities contribute to an organization's financial returns. These results demonstrate that businesses recognize the potential for CSR activities to increase their financial performance, create trust with stakeholders, and improve public opinion of their operations. Additionally, 17.2% of respondents were neutral on the statement. Only 7.8% of respondents strongly disagreed and 9.5% disagreed that CSR activities contribute to an organization's financial returns.

47.4% of the respondents agreed and 25.0% respondents strongly agreed that improved public perception and trust are a result of increased social responsibility efforts by organizations. These results affirm that businesses understand how investing in CSR activities can help them build trust with stakeholders, improve public opinion of their operations, and increase their visibility in the community. Additionally, 14.7% of respondents were neutral on the statement. Only 6.0% of respondents strongly disagreed and 6.9% disagreed that improved public perception and trust are a result of increased social responsibility efforts by organizations.

40.5% of the respondents agreed and 18.1% respondents strongly agreed that CSR activities have a positive impact on employee engagement and motivation. These results demonstrate that businesses understand the value in implementing CSR activities to engage and motivate their employees, create trust with stakeholders, and improve public opinion of their operations. Additionally, 22.4% of respondents were neutral on the statement. Only 7.8% of respondents strongly disagreed and 11.2% disagreed that CSR activities have a positive impact on employee engagement and motivation.

41.4% of the respondents agreed and 19.8% respondents strongly agreed that CSR activities have resulted in increased customer satisfaction for organizations. Additionally, 19.8% of respondents were neutral on the statement. Only 7.8% of respondents strongly disagreed and 11.2% disagreed that CSR activities have resulted in increased customer satisfaction for organizations.

45.7% of the respondents agreed and 19.8% respondents strongly agreed that organizations that demonstrate high levels of social responsibility are better able to attract customers, funding and talent. Additionally, 19.8% of respondents were neutral on the question. Only 6.0% of respondents strongly disagreed and 8.6% disagreed that organizations that demonstrate high levels of social responsibility are better able to attract customers, funding, and talent.

44.0% of the respondents agreed and 22.4% respondents strongly agreed that organizations that engage in meaningful CSR initiatives tend to have higher stock market returns than those who do not invest in such initiatives. Additionally, 18.1% of respondents were neutral on the statement. Only 6.0% of respondents strongly disagreed and 9.5% disagreed that organizations that engage in meaningful CSR initiatives tend to have higher stock market returns than those who do not invest in such initiatives.

42.2% of the respondents agreed and 27.6% respondents strongly agreed that the implementation of CSR initiatives by companies is an important factor in their success. Additionally, 17.2% of respondents were neutral on the statement. Only 5.2% of respondents strongly disagreed and 7.8% disagreed that the implementation of CSR initiatives by companies is an important factor in their success.

**Table 2. Impact of CSR activities on the organizational reputation.**

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %





A. Companies with successful CSR programs tend to enjoy more favourable public opinion about them compared to other companies without such programs	8	6.9%	10	8.6%	23	19.8%	55	47.4%	20	17.2%
B. Public perception of an organization is enhanced when it actively pursues CSR initiatives in its operations	7	6.0%	11	9.5%	19	16.4%	55	47.4%	24	20.7%
C. A company's reputation and brand image are affected by its commitment to social responsibilities	7	6.0%	11	9.5%	17	14.7%	59	50.9%	22	19.0%
D. CSR activities help increase trust among stakeholders, customers and the public	7	6.0%	10	8.6%	22	19.0%	56	48.3%	21	18.1%
E. Companies that invest in CSR programs tend to have higher customer loyalty rates	8	6.9%	12	10.3%	22	19.0%	49	42.2%	25	21.6%
F. Companies that demonstrate a passion for social responsibility attract more talented employees	5	4.3%	9	7.8%	15	12.9%	59	50.9%	28	24.1%
G. Improved corporate reputation leads to increased financial returns	8	6.9%	12	10.3%	21	18.1%	50	43.1%	25	21.6%
H. Organizations with effective CSR practices enjoy better brand recognition than those without	10	8.6%	13	11.2%	20	17.2%	52	44.8%	21	18.1%
I. Customers tend to be more loyal to companies which invest in socially responsible initiatives	9	7.8%	12	10.3%	25	21.6%	46	39.7%	24	20.7%

The table shows that 47.4% of the respondents agreed and 17.2% strongly agreed that companies with CSR programs benefit from more favourable public opinion than those without. 19.8% of the respondents were neutral about the same. 8.6% of the respondents disagreed whereas 6.9% strongly disagreed that successful CSR programs contribute to more favourable public opinion of the companies. This shows that there is a general consensus amongst the respondents that successful CSR programs do have a positive impact on the reputation of the company.

The table shows that 47.4% of the respondents agreed and 20.7% strongly agreed that public perception of an organization is enhanced when it actively pursues CSR initiatives in its operations. 16.4% of the respondents were neutral about the same, 9.5% of the respondents disagreed whereas 6.0% strongly disagreed that public perception of an organization is enhanced when it actively pursues CSR initiatives in its operations. This shows that there is a general consensus amongst the respondents that active pursuit of CSR initiatives does have a positive impact on the reputation of the company.

The table shows that 50.9% of the respondents agreed and 19.0% strongly agreed that a company's reputation and brand image are affected by its commitment to social responsibilities. 14.7% of the respondents were neutral about



the same. 9.5% of the respondents disagreed whereas 6.0% strongly disagreed that a company's reputation and brand image are affected by its commitment to social responsibilities.

The table shows that 48.3% of the respondents agreed and 18.1% strongly agreed that CSR activities help increase trust among stakeholders, customers and the public. 19.0% of the respondents were neutral about the same. 8.6% of the respondents disagreed whereas 6.0% strongly disagreed that CSR activities help to increase trust among stakeholders, customers and the public.

The table shows that 42.2% of the respondents agreed and 21.6% strongly agreed that companies that invest in CSR programs tend to have higher customer loyalty rates. 19.0% of the respondents were neutral about the same. 10.3% of the respondents disagreed whereas 6.9% strongly disagreed that companies with CSR programs tend to have higher customer loyalty rates. This shows that there is a general consensus amongst the respondents that successful CSR programs do have a positive impact on customer loyalty.

The table shows that 50.9% of the respondents agreed and 24.1% strongly agreed that companies that demonstrate a passion for social responsibility attract more talented employees. 12.9% of the respondents were neutral about the same. 7.8% of the respondents disagreed whereas 4.3% strongly disagreed that companies with CSR programs tend to have higher customer loyalty rates. This shows that there is a strong agreement amongst the respondents that companies with a commitment to social responsibility are attractive to talented employees. The table shows that 43.1% of the respondents agreed and 21.6% strongly agreed that improved corporate reputation leads to increased financial returns. 18.1% of the respondents were neutral about the same. 10.3% of the respondents disagreed whereas 6.9% strongly disagreed that improved corporate reputation leads to increased financial returns. This shows that there is a strong agreement amongst the respondents that successful CSR programs do have a positive impact on financial returns.

The table shows that 44.8% of the respondents agreed and 18.1% strongly agreed that organizations with effective CSR practices enjoy better brand recognition than those without. 17.2% of the respondents were neutral about the same. 11.2% of the respondents disagreed whereas 8.6% strongly disagreed that organizations with effective CSR practices enjoy better brand recognition than those without. This shows that there is a general consensus amongst the respondents that successful CSR programs do have a positive impact on brand recognition.

The table shows that 39.7% of the respondents agreed and 20.7% strongly agreed that customers tend to be more loyal to companies which invest in socially responsible initiatives. 21.6% of the respondents were neutral about the same. 10.3% of the respondents disagreed whereas 7.8% strongly disagreed that customers tend to be more loyal to companies which invest in socially responsible initiatives. This shows that there is a general consensus amongst the respondents that successful CSR programs do have a positive impact on customer loyalty.

## Testing of hypotheses

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
A. CSR Activities have had a beneficial impact on organizational performance.	116	3.9741	.97322	.09036
B. CSR Activities have led to positive public opinion about the company in society.	116	3.9655	.94115	.08738
C. CSR activities helped create good relationships between the organization and stakeholders	116	3.9741	1.02543	.09521
D. The reputation of an organization is related to its level of commitment towards social responsibility initiatives	116	4.0259	.96424	.08953
E. Organizations that engage in CSR activities tend to have higher rates of customer loyalty.	116	3.8448	1.05174	.09765
F. CSR activities contribute to an organization's financial returns.	116	3.5862	1.12728	.10467



G. Improved public perception and trust are a result of increased social responsibility efforts by organizations.	116	3.7845	1.08593	.10083
H. CSR activities have a positive impact on employee engagement and motivation.	116	3.5000	1.14588	.10639
I. CSR activities have resulted in increased customer satisfaction for organizations.	116	3.5431	1.16015	.10772
J. Organizations that demonstrate high levels of social responsibility are better able to attract customers, funding and talent.	116	3.6466	1.08150	.10041
K. Organizations that engage in meaningful CSR initiatives tend to have higher stock market returns than those who do not invest in such initiatives.	116	3.6724	1.10945	.10301
L. The implementation of CSR initiatives by companies is an important factor in their success.	116	3.7931	1.09161	.10135

The above table shows that all the means have values over 3. This means that there is a general level of agreement amongst the respondents about the CSR activities having an impact of organizational effectiveness. The results of the One-Sample T test are as follows:

One-Sample Test						
	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
A. CSR Activities have had a beneficial impact on organizational performance.	10.781	115	.000	.97414	.7952	1.1531
B. CSR Activities have led to positive public opinion about the company in society.	11.049	115	.000	.96552	.7924	1.1386
C. CSR activities helped create good relationships between the organization and stakeholders	10.232	115	.000	.97414	.7855	1.1627
D. The reputation of an organization is related to its level of commitment towards social responsibility initiatives	11.459	115	.000	1.02586	.8485	1.2032
E. Organizations that engage in CSR activities tend to have higher rates of customer loyalty.	8.651	115	.000	.84483	.6514	1.0383
F. CSR activities contribute to an organization's financial returns.	5.601	115	.000	.58621	.3789	.7935
G. Improved public perception and trust are a result of increased social responsibility efforts by organizations.	7.781	115	.000	.78448	.5848	.9842
H. CSR activities have a positive impact on employee engagement and motivation.	4.700	115	.000	.50000	.2893	.7107
I. CSR activities have resulted in increased customer satisfaction for organizations.	5.042	115	.000	.54310	.3297	.7565
J. Organizations that demonstrate high levels of social responsibility are better able to attract customers, funding and talent.	6.439	115	.000	.64655	.4476	.8455

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K. Organizations that engage in meaningful CSR initiatives tend to have higher stock market returns than those who do not invest in such initiatives.	6.528	115	.000	.67241	.4684	.8765
L. The implementation of CSR initiatives by companies is an important factor in their success.	7.825	115	.000	.79310	.5923	.9939

The results shown above indicate that all the mean differences are positive and that they are not equal to the hypothesized mean of 3. This is because the P values are less than 0.05. We can therefore reject the null hypothesis and accept that CSR activities have a profound impact on organizational effectiveness.

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
A. Companies with successful CSR programs tend to enjoy more favourable public opinion about them compared to other companies without such programs	116	3.5948	1.08731	.10095
B. Public perception of an organization is enhanced when it actively pursues CSR initiatives in its operations	116	3.6724	1.09366	.10154
C. A company's reputation and brand image are affected by its commitment to social responsibilities	116	3.6724	1.07765	.10006
D. CSR activities help increase trust among stakeholders, customers and the public	116	3.6379	1.06646	.09902
E. Companies that invest in CSR programs tend to have higher customer loyalty rates	116	3.6121	1.14034	.10588
F. Companies that demonstrate a passion for social responsibility attract more talented employees	116	3.8276	1.02385	.09506
G. Improved corporate reputation leads to increased financial returns	116	3.6207	1.13945	.10580
H. Organizations with effective CSR practices enjoy better brand recognition than those without	116	3.5259	1.16814	.10846
I. Customers tend to be more loyal to companies which invest in socially responsible initiatives	116	3.5517	1.15980	.10768

The above table shows that all the means have values over 3. This means that there is a general level of agreement amongst the respondents about the CSR activities having an impact on organizational effectiveness. The results of the One-Sample T test are as follows:

One-Sample Test						
	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
A. Companies with successful CSR programs tend to enjoy more favourable public opinion about them compared to other companies without such programs	5.892	115	.000	.59483	.3949	.7948
B. Public perception of an organization is enhanced when it actively pursues CSR initiatives in its operations	6.622	115	.000	.67244	.4736	.8736


  
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C. A company's reputation and brand image are affected by its commitment to social responsibilities	6.720	115	.000	.67241	.4742	.8706
D. CSR activities help increase trust among stakeholders, customers and the public	6.443	115	.000	.63793	.4418	.8341
E. Companies that invest in CSR programs tend to have higher customer loyalty rates	5.781	115	.000	.61207	.4023	.8218
F. Companies that demonstrate a passion for social responsibility attract more talented employees	8.706	115	.000	.82759	.6393	1.0159
G. Improved corporate reputation leads to increased financial returns	5.867	115	.000	.62069	.4111	.8303
H. Organizations with effective CSR practices enjoy better brand recognition than those without	4.848	115	.000	.52586	.3110	.7407
I. Customers tend to be more loyal to companies which invest in socially responsible initiatives	5.124	115	.000	.55172	.3384	.7650

The results shown above indicate that all the mean differences are positive and that they are not equal to the hypothesized mean of 3. This is because the P values are less than 0.05. We can therefore reject the null hypothesis and accept that CSR activities have a positive impact on the reputation of the company in society.

## Conclusion

The results of this survey should be considered in the planning and implementation of any corporate social responsibility initiatives. It is clear that CSR not only has the potential to benefit society, but also improve the reputation and financial performance of businesses. Companies should therefore invest in socially responsible initiatives to reap the rewards. In conclusion, this survey has shown that there is a strong agreement amongst respondents that successful CSR programs do have a positive impact on customer loyalty, attracting talented employees, financial returns and brand recognition. Companies should therefore invest in socially responsible initiatives to enjoy these benefits.

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## A STUDY OF COMPLIANCE OF CORPORATE SOCIAL RESPONSIBILITY IMPLEMENTATION PRACTICES WITH RESPECT TO CSR PROVISIONS AS STATED IN THE COMPANIES ACT 2013 WITH SPECIAL REFERENCE TO LARGE-SCALE ORGANIZATIONS IN PUNE

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### ABSTRACT

The Companies Act 2013, Sec.135 came into force on the first of April 2014, which brought major changes in the way CSR practices are implemented by organizations in India. The most important changes are the allocation of 2 % CSR funds, the compulsion to spend it through a CSR committee in accordance with Sec.135 of the Companies Act, the formation of CSR policy and compulsory CSR disclosures, etc.

This study aims to determine how large-scale organizations in Pune have implemented CSR in the post-CSR mandate period.(2017-18,18-19,19-20 & 20-21). Large-scale organizations in Pune are surveyed using a structured questionnaire. In addition to examining whether large-scale organizations' CSR policies comply with the Companies Act 2013, the survey assesses whether different aspects of an organization's CSR practices are relevant to its CSR policy, as stated in the law. This includes the content of CSR policy, composition of the CSR committee, creation of the CSR fund, implementation modalities, implementing partners, monitoring and performance assessment methods, roles and responsibilities of the Board of Directors and the CSR committee members, as well as the disclosure practices regarding CSR. The collected data is analyzed using SPSS software and MS-excel. Hypotheses testing is done using Pearson's Correlation Coefficient, Linear Modelling, MANOVA (Multivariate analysis of variance), and Paired Sample T-test.

According to key findings, most large-scale organizations in Pune are implementing CSR practices in accordance with Sec.135 of the Companies Act 2013. There is a high degree of compliance with Sec.135 of the Companies Act 2013 related to different CSR provisions in different organizations.

**Keywords:** CSR, Companies Act 2013, CSR implementation, CSR Committee

### INTRODUCTION

#### A Conceptual Background

The business dictionary defines CSR as "An organization's commitment to the environment (both ecological and social) where it operates". "Failure of society makes it impossible for businesses to succeed" highlights the significance of Corporate Social Responsibility.

Abhijit Naskar (2020) stated that social progress begins with adopting a neighborhood, making its problems your own, and finding ways to solve them, also taking care of your neighborhood as if it was your own family will eventually lead the world to have enough individuals to handle all the problems of all the neighborhoods worldwide.

According to Campbell (2006) "An organization's CSR policy sets a minimum behavioral standard that aims to prevent harm to stakeholders and rectifies it as soon as it is identified".

India has a rich history of CSR ranging from charity and corporate philanthropy to present-day strategic CSR. In terms of nominal GDP, India is the fifth-largest economy worldwide, and in terms of purchasing power parity, it is the third-largest. Being the second-largest populated country with a total population crossing the line of 1.4 billion, India is facing many socio-economic challenges. There is approximately one-third of Indians are illiterate, two-thirds are unable to access adequate sanitation, resulting in income and regional disparities to reduce which only government initiatives are inadequate. The Companies Act 2013, therefore, should be credited for being an important step in obtaining funding from the business sector to complement the government's social development goals programs, ensuring that the company contributes to the country's economic development in a fair and sustainable way.

### REVIEW OF LITERATURE

The concept of CSR is deeply rooted in the global business agenda, but many barriers are reported to be overcome for its effective implementation which involves informing stakeholders about CSR



by effectively referring to the mission, vision, and goals of the company and applying CSR at all stages of the company's operation, as stated by the author while evaluating the problems and difficulties experienced by Indian organizations while implementing CSR, Vandna Abuja (2013).

CSR is most effective when it is clearly defined and aligned with the existing policy framework and the vision and mission of an organization. The possibility for the Government of India to employ CSR strategically in the Indian context can be done by providing a favorable policy environment as stated in the concluding remarks. An Agenda for Sustainable Inclusive Growth by PHD Chamber of Commerce, New Delhi (2013).

While studying strategic corporate social responsibility at the Hindustan construction company, discovered that the CSR practices helped the business make more earnings, decrease accidents and reinforce relations with local communities, Mark Lee Hunter & Luk N. Van Wassenhove (2014).

Industries in India are undergoing changes, new customer value chains are evolving, and new models of collaborations are becoming popular. Organizations need to clearly define the purpose and the outcomes they want to achieve in post CSR mandate era. They also stated that different organizations view CSR differently and organizations have three broad choices namely complier only, social license/equity builder & nation builders in CSR implementation, Boston Consultancy Group & NASSCOM Foundation (2015).

As stated in the CRISIL CSR yearbook, Indian companies are responding well to CSR mandates and private companies are spending more than public companies, while smaller companies are spending more than large ones. Education, health care, rural development, and environmental protection account for the majority of CSR expenditures. Compliance disparities were negligible across regions, Ramraj Pai, Nitesh Jain & Prabhash Choudhary (2015).

CSR was done in an unsystematic and partial way by most of the organizations selected for research. Most private companies preferred to spend CSR resources in fields such as education and community development. Government mandates and stakeholder expectations were the primary motivation behind doing CSR, Ramendra Singh, Madhupa Bakshi & Prashant Mishra (2015).

Government should formulate suitable policies to implement CSR projects and suitable incentives should be paid to companies carrying CSR operations. The connection between macroeconomic policy and micro-level modifications should be identified by the corporate sector in order to initiate suitable CSR measures. CSR has been perceived positively by the Indian corporate sector, and their involvement in CSR initiatives has increased significantly, Barnabas & Vikram Philip (2016).

Poor enforcement of laws is destroying many countries' well-established legal systems, and one of the biggest examples of this is India, Tyagi (2021).

**Research Gap:** The CSR practices adopted by the Large scale organizations post-CSR mandate were studied by many researchers, but the compliance of Corporate Social Responsibility implementation practices with sec.135 of the Companies Act 2013 related to different aspects of CSR is not studied yet.

### OBJECTIVES OF THE STUDY

1. To study the CSR Practices adopted by Large scale organizations post-CSR mandate.
2. To study the compliance of Corporate Social Responsibility implementation practices with sec.135 of the Companies Act 2013.

### RESEARCH HYPOTHESES

The following hypotheses are formulated for the study:

**H1:** CSR policy of the organization is in line with the Sec.135 of the Companies Act 2013

**H2:** Implementation of CSR practices is as per the CSR policy of the Organization

### RESEARCH METHODOLOGY

**Nature of Research:** Quantitative Research. Because of the nature of the study, the current study embraced the Descriptive research design. This study is an effort to describe the CSR practices adopted by Large scale organizations in the post-mandate period.



**Population for the Study:** The Large-scale organizations in Pune from which the sample is to be selected are technically called Universe or Population. The population for this research is 147 Large Scale organizations in Pune.

**Definition of the Population:** All Large-scale Companies falling in Pune the region – including the Maharashtra Industrial Development Corporation (MIDC) areas in and around the geographical boundaries of Pune are considered as the population for the study.

Pune region consists of Pune City, Pimpri-Chinchwad, Hinjewadi, Talawade, Pirangut, Chakan, Rajagurunagar, Sanaswadi, Ranjangaon, Dehuroad, Talegoan, and Khed- Shivapur. All the Large-scale companies located in these places and are members of MCCIA, CII, and CSRBOX are considered as the population for the study. Only one response has been obtained from one organization.

**Characteristic of the Sample:** Large-scale organizations in the Pune region, which falls under the purview of CSR mandate as per Sec.135 of the Companies Act 2013.

**Sample Frame:**It is a list of all those within a population who can be sampled. The number of Large scale organizations doing CSR keeps changing every year. The total figure is dynamic. Hence, the sample size has been determined based on an informed guesstimate of a number of companies, which has been obtained from MCCIA, CII, and CSRBOX. The sample frame includes the lists received from MCCIA, CII, and CSRBOX.

**Sample Size:** Sample size is determined using Krejcie and Morgan Table, with a 95 % confidence level and 5.04 % Margin of Error. A final sample of 106 companies is obtained. The sample was selected using the Convenience sampling method. The companies selected for the study are both listed and unlisted companies and represent diversified sectors such as engineering, Automobile, Banking, Finance, Consumer Durables, IT (Computer Software), and Oil & Gas.

**Sampling Unit:** CSR heads, CSR Committee members/Managers, Senior HR managers, AGM/Directors working as CSR heads/CSR Committee members.

**Period of the Study:** the study period includes CSR practices adopted by Large Scale organizations in Pune infour financial years, namely F.Y.2017-18, F.Y.2018-19, F.Y.2019-20 and F.Y. 2020-21 (Each financial year includes the period from 1<sup>st</sup> April to31<sup>st</sup> March).

**Collection of Data:** For collecting primary dataon corporate social responsibility, a survey was conducted using a structured questionnaire and a few face-to-face discussions were held. The secondary data was collected from reliable secondary sources such as Annual Company reports, CSR reports published oncompany websites, the National CSR portal, CSR, data from the industry by associations such as MCCIA, and CII. Reports of various Concerned Associations on CSR such as NAVAM and MCCIA, the CRISIL CSR yearbook,HandbookS on Corporate Social Responsibility from CII &PWC, Government websites and various newspaper articles. Methods of Data Analysis and Statistical ToolsarePearson's Correlation Coefficientand Linear Modelling. MANOVA (Multivariate analysis of variance) and Paired Sample T-test.

**Significance of the Study:** This study helps to analyze and understand the level of compliance shown by Large scale organizations in Pune towards different CSR provisions as stated in Sec.135 of the Companies Act 2013.

#### DATA ANALYSIS AND INTERPRETATION

**Reliability Test:** The reliability data as indicated below shows the internal consistency of the questionnaire.

**Table 1. Reliability Statistics**

Cronbach's Alpha	N of Items
.954	96

As the value is .954 which is greater than .5, it shows that questionnaire is reliable and may be used for the collection of data.





**Respondents Information –**

**1. Type of Organization**

It is about the type of organization represented by the respondents.

**Table No.2: Type of Organization**

Type of Organization	No. of Respondents	% of Respondents
Engineering	19	18
Banking	9	8
Manufacturing	16	15
Automobile	22	21
IT	14	13
Chemical	5	5
Food	4	4
Other	17	16

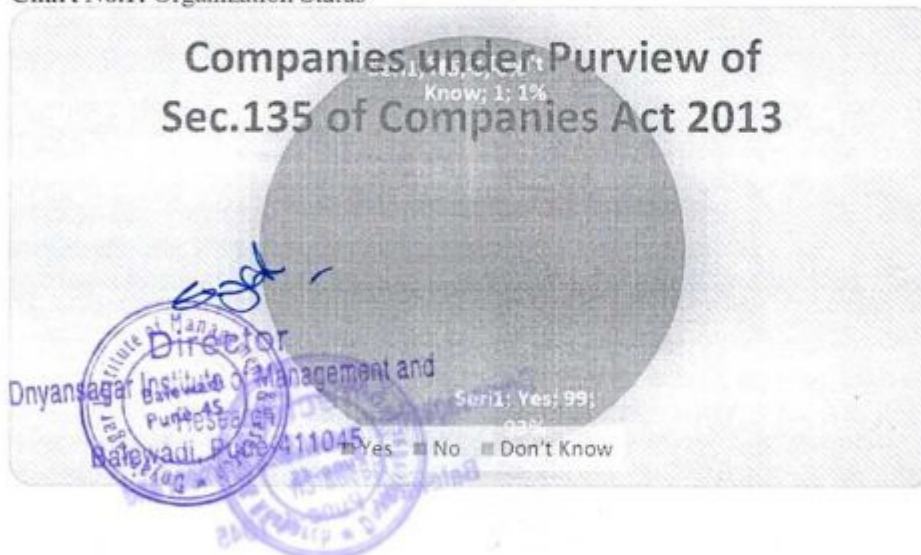
**2. Organization Status**

It is about whether an organization is under the falls under CSR mandate as per the act.

**Table No.3: Organization Status**

No. of Years	No. of Respondents	% of Respondents
Yes	99	93
No	6	6
Don't Know	1	1

**Chart No.1: Organization Status**





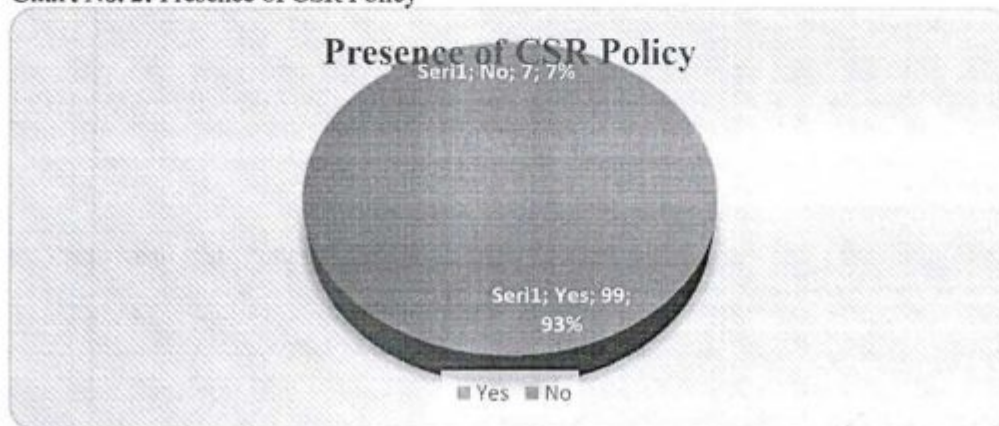
**Interpretation:** Based on the available responses, it can be stated that 93% of the organizations covered during the study fall under purview of Sec.135 of Companies Act 2013 while 6% of organizations do not and only one respondent is not aware about the CSR status of the organization.

### 3. Presence of CSR Policy

**Table No. 4.:** Presence of CSR Policy

Responses	No. of Respondents	% of Respondents
Yes	99	93
No	7	7

**Chart No. 2:** Presence of CSR Policy



**Interpretation:** From the above graph, it can be stated that, as per respondents, 93% of the Large-scale organizations having a CSR policy in place while 7% not having a CSR policy.

#### Hypotheses Testing

*Hypothesis 1: CSR policy of the organization is in line with the Sec.135 of the Companies Act 2013*

#### Description of Variables

The variable which are identified are described in the table presented below.

**Table No. 5:** Description of Variables – Hypothesis 1

Sr. No.	Description of Variable	Variable Name
<b>CSR Policy</b>		
1	Presence of CSR Policy	CSR1
2	Presence of CSR Committee	CSR2
	Sum of Average of values of variables related to CSR Policy	CSRAVG
<b>Organization and CSR Practices</b>		
3	Socially responsible firm	CSRP1
4	The integration of CSR into an organization's business philosophy and strategic planning	CSRP2
5	Formulation of CSR policy as per provisions in New companies act 2013	CSRP3
6	Constitution of CSR Committee as per Sec.135 of Companies Act 2013	CSRP4
	Sum of Average of values of variables related to Organization and CSR Practices	CSRPAVG
<b>Functions of CSR Committee</b>		
7	Inclusion of three or more directors and one independent director	CSRC1
8	Formation and recommendation of CSR policy to the Board	CSRC2
9	Recommendation of activities and the amount of expenditure to be incurred	CSRC3
10	Time to Time Monitoring of the CSR Policy of the company	CSRC4



	Sum of Average of values of variables related to Functions of CSR Committee	CSRCAVG
<b>Responsibilities of Board of Directors</b>		
11	Formation a CSR committee	CSRB1
12	Approval for the CSR Policy	CSRB2
13	Ensuring implementation of the activities under CSR	CSRB3
14	Disclosure of the composition of the CSR Committee	CSRB4
15	Ensuring 2 % spend	CSRB5
16	Disclosing reasons for not spending the amount (if applicable)	CSRB6
	Sum of Average of values of variables related to Responsibilities of Board of Directors	CSRBAVG
<b>Extent of Relevance of Content of CSR policy as per New companies act 2013</b>		
17	An organization's plans for CSR projects or programs	CSRPO1
18	Execution methods of such projects or programs	CSRPO2
19	Schedules for implementation	CSRPO3
20	A clause specifying that the CSR surplus shall not form part of the business profit of the company	CSRPO4
21	Preference to local areas	CSRPO5
22	Monitoring process	CSRPO6
	Sum of Average of values of variables related to Extent of Relevance of Content of CSR policy as per New companies act 2013	CSRPOAVG
<b>Reasons for Doing CSR</b>		
23	Regulatory Obligation (In compliance with Sec.135 of Companies Act 2013)	CSRR1
24	Business responsibility towards society	CSRR2
25	As a part of Corporate Policy	CSRR3
26	Replenish what has been taken from society for business	CSRR4
27	Making use of vital social sector contributions to leverage industrial profits	CSRR5
28	Indirect benefit to company (e g tax saving, publicity)	CSRR6
29	Bringing corporate goals into alignment with societal goals	CSRR7
30	Improving the profile and image of the company	CSRR8
	Sum of Average of values of variables related to Reasons for Doing CSR	CSRRAVG
<b>The extent of CSR disclosure practices as per the New Companies Act 2013</b>		
31	CSR Policy disclosure on the company's website and in the report	CSRSD1
32	Disclosure of Prescribed CSR budget	CSRSD2
33	Disclosure of details of utilization of CSR funds	CSRSD3
34	Disclosure of reasons for not spending the amount (if applicable)	CSRSD4
35	Disclosure of reasons for not spending the amount (if applicable)	CSRSD5
	Sum of Average of values of variables related to Extent of CSR disclosure practices as per New Companies Act 2013	CSRSDAVG
<b>Focus areas of CSR as per Schedule VII of Companies</b>		
36	Preventive health care, eradicating hunger, poverty, and malnutrition	CSRACT1
37	Promoting education, and vocational skills	CSRACT2
38	Promoting gender equality, empowering women, and reducing inequalities	CSRACT3
39	Ensuring environmental sustainability	CSRACT4
40	Protection of national heritage, art, and culture	CSRACT5
41	Measures for the benefit of armed forces veterans, war widows and their dependents	CSRACT6



42	Training to promote sports	CSRACT7
43	Contribution to the Prime Minister's national relief fund	CSRACT8
44	Contributions the central government fund	CSRACT9
45	Rural development projects	CSRACT10
46	Slum area development	CSRACT11
	Sum of Average of values of variables related to Focus areas of CSR	CSRACTAVG

### Hypothesis Testing

A correlation between the identified variables was found for the first hypothesis in order to test its significance. In order to do so, the average value of each parameter considered for hypothesis 1 is separately calculated, and then correlation testing was done for this variable.

**Table No. 6: Correlation Table – Hypothesis 1**

		Correlations							
		CSRAVG	CSRPAVG	CSRCAVG	CSRBAVG	CSRPOAVG	CSRRAVG	CSRDAVG	CSRACTAVG
CSRAVG	Pearson Correlation	1	.777**	.901**	.811**	.629**	.450**	.739**	.361**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000
	N	106	106	106	106	106	106	106	106
CSRPAVG	Pearson Correlation	.777**	1	.983**	.859**	.743**	.408**	.705**	.371**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000
	N	106	106	106	106	106	106	106	106
CSRCAVG	Pearson Correlation	.901**	.983**	1	.956**	.673**	.380**	.795**	.335**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000
	N	106	106	106	106	106	106	106	106
CSRBAVG	Pearson Correlation	.811**	.859**	.956**	1	.669**	.370**	.738**	.310**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.001
	N	106	106	106	106	106	106	106	106
CSRPOAVG	Pearson Correlation	.629**	.743**	.673**	.669**	1	.408**	.530**	.391**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	106	106	106	106	106	106	106	106
CSRRAVG	Pearson Correlation	.450**	.408**	.380**	.370**	.408**	1	.364**	.410**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	106	106	106	106	106	106	106	106
CSRDAVG	Pearson Correlation	.739**	.705**	.795**	.738**	.530**	.364**	1	.272**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.005
	N	106	106	106	106	106	106	106	106
CSRACTAVG	Pearson Correlation	.361**	.371**	.335**	.310**	.391**	.410**	.272**	1
	Sig. (2-tailed)	.000	.000	.000	.001	.000	.000	.005	
	N	106	106	106	106	106	106	106	106

\*\* . Correlation is significant at the 0.01 level (2-tailed).

As observed in the above table value of Pearson Correlation is positive and found to be significant at 0.01 level as the p-value for the 2-tailed test in every case is less than 0.05. It indicates that all the variables are significantly correlated with each other. It may be stated that CSRAVG is - Sum of the Average of values of variables related to CSR Policy, CSRPAVG is - Sum of the Average of values of variables related to Organization and CSR Practices, CSRCAVG is - Sum of the Average of values of variables related to Functions of CSR Committee, CSRBAVG - Sum of Average of values of variables related to Responsibilities of Board of Directors, CSRPOAVG - Sum of Average of values of variables related to Extent of Relevance of Content of CSR policy as per New companies act 2013, CSRRAVG - Sum of Average of values of variables related to Reasons for Doing CSR, CSRDAVG - Sum of Average of values of variables related to Extent of CSR disclosure practices as per New Companies act 2013 and



CSRACTAVG - Sum of Average of values of variables related to Focus areas of CSR as per Schedule VII of Companies are strongly correlated with each other.

In order to test linearity i.e. CSR policy in line with Companies Act 2013, linear modeling is carried out, the output is presented below. Here variables related to the existence of CSR policy and variables related to CSR practices are considered fixed variables and covariable.

The SPSS output was as follows –

**Table No. 7: Multivariate Tests – Hypothesis 1**

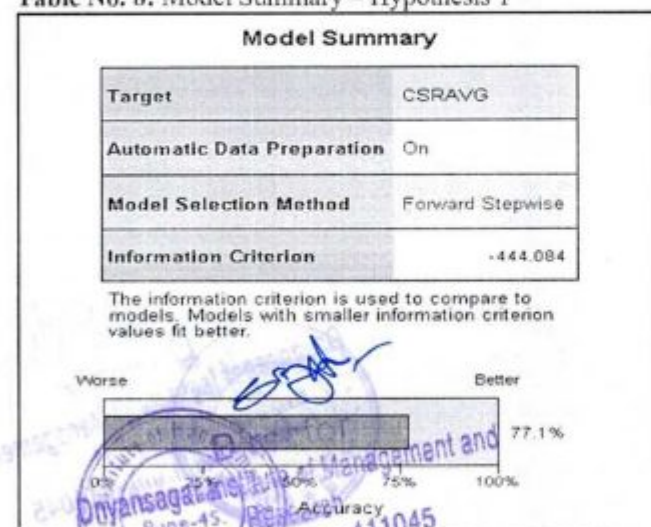
Multivariate Tests <sup>a</sup>						
Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.405	11.103 <sup>b</sup>	6.000	98.000	.000
	Wilks' Lambda	.595	11.103 <sup>b</sup>	6.000	98.000	.000
	Hotelling's Trace	.680	11.103 <sup>b</sup>	6.000	98.000	.000
	Roy's Largest Root	.680	11.103 <sup>b</sup>	6.000	98.000	.000
CSRPAVG	Pillai's Trace	.565	21.244 <sup>b</sup>	6.000	98.000	.000
	Wilks' Lambda	.435	21.244 <sup>b</sup>	6.000	98.000	.000
	Hotelling's Trace	1.301	21.244 <sup>b</sup>	6.000	98.000	.000
	Roy's Largest Root	1.301	21.244 <sup>b</sup>	6.000	98.000	.000
CSRAVG	Pillai's Trace	.330	8.033 <sup>b</sup>	6.000	98.000	.000
	Wilks' Lambda	.670	8.033 <sup>b</sup>	6.000	98.000	.000
	Hotelling's Trace	.492	8.033 <sup>b</sup>	6.000	98.000	.000
	Roy's Largest Root	.492	8.033 <sup>b</sup>	6.000	98.000	.000

a. Design: Intercept + CSRPAVG + CSRAVG  
b. Exact statistic

The above table shows significance related to Pillai's Trace, Wilks Lamda, Hotelling's Trace, and Roy's Largest Root as the p-value (significant value) is less than 0.05.

Further, the output of automatic linear modelingshows agreement with the linear model.

**Table No. 8: Model Summary – Hypothesis 1**





The abovetable clearly indicates that the model is a better fit as the value is 77.1%. It is an indication of acceptance of the first hypothesis, it can be stated that in the case of Large-Scale organizations the CSR policy is in line with the Sec.135 of the Companies Act 2013.

**Hypothesis 2: Implementation of CSR practices is as per the CSR policy of the Organization.**

Statistically, Hypothesis 2 can be stated as follows:

**H<sub>0</sub>:** Implementation of CSR practices is not as per the CSR policy of the Organization.

**H<sub>1</sub>:** Implementation of CSR practices is as per the CSR policy of the Organization.

**Description of Variables**

The variable description related to second hypothesis is as follows –

**Table No. 9:** Description of Variable – Hypothesis 2

Sr. No.	Description of Variable	Variable Name
<b>Organization and CSR Practices</b>		
1	Presence of CSR Policy	CSR1
<b>CSR Implementation and Organization</b>		
2	CSR as a part of Business Strategy	CSRIMP1
3	Selection of CSR activities are in accordance with Schedule VII of Companies Act 2013	CSRIMP2
4	Identification of Community needs through proper mechanisms before CSR implementation	CSRIMP3
5	Implementation and monitoring of CSR is in compliance with CSR policy	CSRIMP4
6	Precautions by the management about availability of CSR Funds	CSRIMP5
7	Transparency about utilization of CSR Fund.	CSRIMP6
8	Encouragement and providing enough support for implementation of CSR activities	CSRIMP7
9	Benefit of CSR to organization and community.	CSRIMP8
<b>Involvement of Stakeholders and CSR Implementation</b>		
10	Board (Top Management) ensure that the CSR activities are conducted as per CSR policy of the company	CSRIMP9
11	The employees of the organization engaged/ involved in the implementation of CSR activities	CSRIMP10
12	Community members are actively involved in CSR activities carried out by Organization	CSRIMP11
14	CSR activities are implemented through Registered Trusts or society	CSRIMP12
15	CSR activities are implemented through NGO	CSRIMP13
16	The CSR activities are carried out in a collaboration with other companies	CSRIMP14
17	There is a collaboration of Government PPP (Public Private Partnership) for the execution of CSR activities	CSRIMP15
18	The CSR department directly carries out CSR activities	CSRIMP16
19	There is a CSR foundation for the implementation of CSR	CSRIMP17
	Sum of Average of values of variables related to CSR Implementation	CSRIMPAVG

In the case of the second hypothesis again the sum of the average value of variables related to the implementation of CSR (the variable description given previously) was found and then confirmation followed by paired sample testing was done to test the hypothesis. The result of the analysis is given below.





**Table No. 10: Correlation Table – Hypothesis 2**

Correlations			
		CSR1	CSRIMPAVG
CSR1	Pearson Correlation	1	.530**
	Sig. (2-tailed)		.000
	N	106	106
CSRIMPAVG	Pearson Correlation	.530**	1
	Sig. (2-tailed)	.000	
	N	106	106

\*\* . Correlation is significant at the 0.01 level (2-tailed).

It can be stated that the variable CSR i.e. the Presence of CSR Policy is positively and significantly correlated with CSRIMPAVG i.e. Sum of the Average of values of variables related to CSR Implementation. Then Paired Sample Test is carried out to test the hypothesis. The outcome is presented below.

**Table No. 11: Paired Samples Test – Hypothesis 2**

Paired Samples Test									
		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	CSR1-CSRIMPAVG	-1.99168	47619	04625	-2.08338	-1.89997	-43.062	105	.000

As the p-value < 0.05, it can be stated that the implementation of CSR is happening as per the CSR policy framed by the Large-Scale organization which is in accordance with Company Act 2013. It is an indication of acceptance of the second hypothesis.

### FINDINGS

The testing of the first hypothesis confirmed that the CSR policies of large-scale organizations are in accordance with the Companies Act 2013. The second hypothesis acceptance affirmed the first hypothesis, stating that CSR is implemented according to the CSR policy formulated by each Large-Scale organization, in accordance with the Companies Act 2013.

### CONTRIBUTION TO THE RESEARCH AREA

The researcher studied the extent of compliance of CSR practices with Sec.135 of the Companies Act 2013 based on multiple parameters such as calculation of CSR budget, formation of CSR policy and Committee, CSR implementation procedure, and modalities used for CSR execution.

### SCOPE FOR FURTHER RESEARCH

- The comparative study of different CSR implementing modalities used for CSR execution will help the companies to select the most appropriate implementing partner for CSR execution as per the need and suitability.
- Research on the evaluation of the impact of CSR on different stakeholders will further enhance the CSR performance of the company.
- The effects of implementing CSR practices in compliance with CSR policy formed on organizational performance can be studied using qualitative research.

### CONCLUSION

Most Organisations have formed CSR committees to form and implement CSR policies. The Board of Directors and CSR committee members are found performing their responsibilities to a great extent as specified in Sec. 135 of the Companies Act, 2013. In concluding remark, it can be stated that most of the large-scale organizations in



Pune that fall under the purview of CSR have conducted CSR as per provisions in Section 135 of the Companies Act 2013.

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## **A Study on Positioning Strategies and its Impact on Consumer Behaviour with special reference to Nutritional Products Exclusively meant for Women During Pregnancy**

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### **Abstract**

The current paper deals with the issue of examining the purchase behavior of pregnant women and their impact on the positioning strategies used by nutritional products exclusively meant for them during pregnancy. The findings show that the concerned product samples were positioned to reach out to new consumers which were mostly health-conscious, young women. 4 basic positioning strategies have been used by the researcher which are competitive positioning, product positioning, situational positioning, and perceptual positioning. A sample of 133 pregnant women who were between 2-7 months in their pregnancy was considered for the purpose of the study. The findings of the study show that the nutritional products exclusively meant for pregnant women are positioned in a competitive manner, while they are positioned in the situational and perceptual context which were generated by their health-consciousness and young age. Positioning strategies have a fair impact on the buying behaviour of the consumers.

**Key Words:** Pregnancy, Purchase Behavior, Nutritional Products Exclusively meant for Women During Pregnancy, Positioning Strategies.

### **Introduction**

Pregnancy is a time in a woman's life that is considered to be one of the most important as it is the time when she will give birth to her child. The child will be nurtured by the mother during this sensitive period of her life. The psychological influence on women can be seen from the fact that their hormones become more active, resulting in several pregnancy complications like headaches. The understanding of how hormonal changes affect vulnerable



pregnant women can make them aware about how to counter them (Bennett, 2008). Women tend to make several lifestyle changes during pregnancy which result in behavioral changes. This provides an opportunity to companies to reach out to them and also be a part of the child's early development.

Women are recognized as the more health conscious segment of the population as they make most of their health related decisions and modifications taking into account their health. The emotional and physical changes undergone by pregnant women can be hypothesized to be due to hormonal fluctuations occurring in the body during this sensitive stage of life. Therefore, companies can exploit the following research findings to develop products and services which are designed in accordance with pregnant women's demands and requirements. The truth that many women have some dietary restrictions, specially during pregnancy, can also be used as an opportunity by companies to develop products and services that cater to their needs.

Pregnancy is one of the most difficult periods in a woman's life due to the changes happening in her body. The hormonal fluctuations that are occurring in her body lead to several changes in the body's functioning and also have an impact on one's behavior. The attitudes and opinions of a pregnant woman start changing as she progresses from the first trimester to the third trimester (Bennett, 2008). Often, during this time women decide to cut down on their drinking and smoking habits in order to ensure that their child receives the best possible nourishment. Women also tend to prefer healthier snacks like fruits while they eliminate junk food from their diet. This is an opportunity which can be tapped by companies so as to develop a product which will cater to the needs of pregnant women. Such products will ensure that pregnant women receive the nutrients required by them during pregnancy and also give them a feeling of being healthy. The market for such a product is expected to be large as there are numerous women who are likely to get pregnant in their lives (Masters, 2003). During pregnancy, women have to take care of themselves as well as their developing child. Nutrition plays a crucial role in the development of the fetus, hence pregnant women have special dietary requirements which need to be fulfilled.

In India, there are several brands that sell dietary supplements which are specifically meant for pregnant women. The following are the top 10 preferred brands of dieticians and women who consume supplements.

1. Protinex Mama Protein Powder for Pregnancy
2. Horlicks Mother's Plus
3. Pro360 MOM Pregnancy Protein Powder
4. Organic Plant Protein, For Everyday Fitness – Unflavoured
5. Vivamom™ Maternal Nutrition Supplement- Vanilla
6. British Biologicals Pro-PL
7. HealthBestPregnabest Protein Powder for Women
8. Nestle Resource High Protein Powder, Vanilla, 400g
9. Pristine Balance PL Powder Chocolate



## 10. Geo Fit Mom Protein Powder

Protein powder has been a popular source of protein for vegetarians and vegans who don't eat meat. Many people want to take it because it can help them bulk up and gain muscle, but not everyone knows that there is something else that protein powder does during pregnancy. Thus, it is beneficial for lactated women to use the best protein powder for pregnant women in India. For marketing the nutritional supplements, companies use a mix of competitive positioning, product positioning, situational positioning, and perceptual positioning.

Health conscious lifestyle, therefore, leads to increased appeals for new foods and products specially developed to cater to the needs of women who are pregnant. The concept of "Super Foods" has been gaining popularity among a lot of consumers. These Super Foods are considered to be healthier and provide greater health benefits than other foods which makes them more marketable (Bennett et al., 2004). The desire among people for healthy food can be exploited by the companies which can develop products that are exclusively meant for pregnant women. These products can be in the form of dietary supplements or regular food items. The current paper deals with the issue of examining the purchase behavior of pregnant women and their impact on the positioning strategies used by nutritional products exclusively meant for them during pregnancy.

### Review of Literature

Tusk (2016) conducted a study in which he examined the purchase behavior of pregnant women and their impact on the positioning strategies used by nutritional products exclusively meant for them during pregnancy. The objectives of his study were to:

- a. Identify the factors which influence the purchase decisions of pregnant women
- b. Identify the consumer behaviors of pregnant women
- c. Determine the consumer perceptions of nutritional products exclusively meant for pregnant women
- d. Analyze whether or not there are any differences in consumer behavior between different socio-demographic groups.

The study focused is on the consumers (pregnant women), their purchase decision making process, their perception and behaviors regarding nutritional products exclusively meant for them during pregnancy and also how this impacts on their decisions of buying these products.

The results of the study state that pregnant women are more likely interested in the nutritional benefits of purchasing these products and also believe that they help to improve their health. This led to a high level of acceptance and trust in the market. The study further concluded that there was a high variance in the decision making processes which can be attributed to several factors such as:

- a. The type of product purchased (healthy, safer, or normal)



- b. The price that they are willing to pay for this correct product
- c. The perception of their benefits from consuming this product
- d. Attitudes towards nutrition and their beliefs about nutrition and its role in their health
- e. Pregnancy related lifestyle changes such as dieting and exercise
- f. Other factors that influenced the purchase decision process.

The study concluded that there were significant differences among the socio-demographic groups such as age, gender and marital status of the pregnant women.

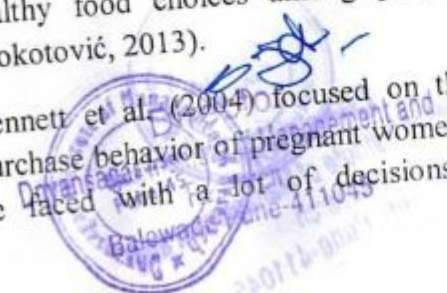
The findings suggest that there are significant differences in their decision making process, product preferences, perceptions and behaviors as well as their purchasing behavior which can be linked to their lifestyle changes during pregnancy such as dieting and exercise. These findings result in a significant impact on these women's decisions and also suggests an opportunity to market these nutritional products exclusively meant for them during pregnancy (Tusk, 2016).

Kokotović (2013) examined the impact of maternity leave on food culture traits of mothers living in Croatia. Food culture consists of different habits related to food and eating although it should be noted that some cultures do not have dominant food culture traits. The goal of this research was to examine the impact on pregnant women's food culture traits after maternity leave.

There are various factors which influence the characteristics of consumers or their food preferences, including lifestyle, health behaviors, age and socio-economic level. The perceptions and attitudes towards nutrition also play a role in the final decision to buy certain types of foods (Opwis et al., 2005). It is worth noting that as we transition into our new lives as mothers, there are also significant changes in our lifestyles including our eating habits. Some of these changes include hormonal fluctuations and fatigue, which can affect our food preferences and body image (Kokotović, 2013).

The study collected data by using questionnaires that were sent to the mothers. The questionnaire consisted of a series of questions regarding their perceptions and beliefs of certain aspects related to food culture. Data collection was done in the area where they lived and also in the areas where they spent more time such as markets and pharmacies. The topic of dieting was also researched due to the fact that there is a prevalence in eating disorders among women who are pregnant. The study concluded that there is an increased desire for healthy food choices among pregnant women in Croatia as well as other countries (Kokotović, 2013).

Bennett et al. (2004) focused on the issue of identifying the factors that influence the purchase behavior of pregnant women. It should be noted that women who are pregnant will be faced with a lot of decisions concerning their health, nutrition and well-being.





Experiencing these changes during pregnancy can affect their eating behavior which impacts on their food preferences and food choices (Bennett et al., 2004).

The study examined the purchase behavior of pregnant women in the United States by using data collected through questionnaires. This information was analyzed using binary logistic regression models and multiple linear regression models. The study focused on the following factors:

1. Impact of pregnancy on food preferences and choice patterns
2. Purchase behaviors of pregnant women.

It should be noted that pregnant women are likely to change their food preferences during pregnancy, however their decision is influenced by a number of factors and not just health-related issues (Bennett et al., 2004).

The results of this study concluded that there was a significant variation in purchasing behavior which was determined by socio-demographic indicators such as age, lifestyle and also marital status. Some other factors that influenced the decision making process were:

1. The price of the product purchased (affordable vs pricey)
2. Health consciousness
3. Women's attitude towards buying this product
4. Emotional factors and also social influences
5. Other factors that influenced the purchase decision process (Bennett et al., 2004).

The study concluded that there are several significant differences amongst the socio-demographic indicators such as age, lifestyle and marital status of the pregnant women which impacts on the decision making process, product preferences, perceptions and behaviors (Bennett et al., 2004). This study provides an insight into women's food culture traits after maternity leave. It also states that demographic factors such as socio-economic level have a significant influence on their purchase behavior.

Sathyanarayana et al. (1997) conducted a study to determine the risks and benefits of using different types of supplements during pregnancy. It should be noted that pregnant women are likely to face a lot of decisions which can impact on their health and well-being, including their nutrition. These decisions can affect their lifestyle including eating habits.

The study examined the consumption of prenatal multivitamins during pregnancy by interviewing the mothers. The results show that there is an increase in consumption in multivitamins during the first trimester and also in their third trimester (Sathyanarayana et al., 1997). The study concludes that there is a significant variability in this population, which indicates the need to examine the risk factors of using various supplements during pregnancy (Sathyanarayana et al., 1997).



A research conducted by Shukla-Bhatt et al. (2012) examined the food habits and its influence on consumer buying behavior. It should be noted that different categories of people face their own set of challenges which can affect their lifestyle including dieting, exercise patterns and nutrition choices. Pregnant women are faced with multiple decisions that can impact on their health and well-being.

A study by Stavri et al. (1994) conducted a survey in order to determine the perception of pregnant women regarding the methods used for physically abusing their body. It should be noted that child abuse and neglect are a leading cause of childhood injuries. This study is significant because it gives insight into the factors that influence women's eating habits and dietary patterns during pregnancy.

Data was obtained by interviewing mothers who were 35 years old or above and also those who were expecting their first children. The results showed that 57% of the mothers said they used some method which was harmful to their health. The following factors that influence this behavior are also listed:

1. The level of education a woman has
2. Her relationship with their children
3. The social context in which they were living
4. The economic status of their family
5. Their perception towards nutrition and dieting during pregnancy (Stavri et al., 1994).

The study concluded that there is an increase in the use of abusive methods amongst pregnant women because they are likely to face a lot of challenges during pregnancy which can affect their health and well-being. It notes that women use these kinds of methods because they do not want to feel bad about themselves when facing these changes (Stavri et al., 1994).

This study provides an insight into women's food culture traits after maternity leave. It also states that demographic factors such as socio-economic level have a significant influence on their purchase behavior.

Kamath et al. (2012) conducted a survey to determine the daily dietary intake of pregnant women in order to distinguish the differences between rural and urban areas, as well as different age groups. The results showed that there is an increase in daily energy intake among pregnant women with increasing age. This study is significant because it gives insight into the dietary pattern of pregnant women from all age groups, thereby providing an insight into their eating habits and perceptions (Kamath et al., 2012).

This study concluded that there is an increase in energy intake during pregnancy for women above 35 years of age. This increase can cause health problems (Kamath et al., 2012). This study provides an insight into women's food culture traits after maternity leave. It also states that demographic factors such as socio-economic level have a significant influence on their purchase behavior.



A study by Tripathi et al. (2014) was conducted to identify the food habits and cultural eating pattern of pregnant women and its influence on their buying behavior. It should be noted that consumer buying behavior can be influenced by various factors such as economical factors, demographic, product/brand preference and perceptions. This study concluded that there is an increase in the consumption of food products from brands because there is an increase in income when they are expecting.

A research conducted by Jagannathan et al. (2014) examines the quality of nutrition supplied to pregnant women and its influence on their eating habits. It was hypothesized that those women who had better access to information about nutrition, their food choices would be healthier. The study used dietary questionnaires which were provided to women during different stages of their pregnancy. The results of the survey showed that there is no significant difference in the quality of nutrition supplied to pregnant women from both NICUs and private clinics.

The study also concluded that there is no significant difference in the food options available to pregnant women (Jagannathan et al., 2014). This study provides an insight into the effects of malnutrition on pregnant women's eating habits. It also states that demographic factors such as socio-economic level have a significant influence on their purchase behavior.

A research conducted by Raju et al. (2017) examined the effect of pregnancy on women's dietary habits in order to differentiate the impact of demographic, socio-economic and cultural factors on women's purchasing behavior. It was hypothesized that there is no significant difference in food choices between mothers from different socio-economic classes (Raju et al., 2017).

This research concluded that there is no significant difference in food choices between mothers from low and high income groups. This could be attributed to the fact that these kinds of variables are not associated with food choices (Raju et al., 2017). The study provides an insight into the effects of malnutrition on pregnant women's eating habits. It also states that demographic factors such as socio-economic level have a significant influence on their purchase behavior.

Lata et al. (2018) conducted a research to determine the food habits and eating pattern of women after delivery, as well as to identify the factors that influence their food choices during pregnancy. It should be noted that factors such as physical changes during pregnancy, cultural beliefs etc. can influence the dietary choices of women. This study concluded that there is an increase in food intake after delivery because of diet fads and advertisements depicting celebrities.

A study conducted by Subhashini et al. (2019) examined the dietary pattern of pregnant and lactating mothers, as well as its influence on their health and eating habits. The impact of consumption of non-vegetarian food was assessed in order to determine the association between vegetarianism and pregnancy. This study concluded that there is an increase in the consumption of non-vegetarian food because of the influence of media and celebrities.



## Research Gap

There is paucity of research on the purchase behaviour of pregnant women and the impact of the positioning strategies used by nutritional products exclusively meant for them during pregnancy. Four basic positioning strategies have been used by the researcher which are competitive positioning, product positioning, situational positioning, and perceptual positioning.

## Objectives of the study

1. To examine the purchasing behaviour of pregnant women for nutritional products exclusively meant for them during pregnancy.
2. To study the impact of positioning strategies on the buying behaviour of pregnant women for nutritional products.

## Hypotheses

H1: Pregnant women are more health conscious and more interested in buying nutritional products that exclusively meant for them during the pregnancy period.

H2: The impact of positioning strategies on purchase behaviour of pregnant women is significant.

## Methodology

- A sample of 133 pregnant women who were between 2-7 months in their pregnancy was considered for the purpose of the study. Four basic positioning strategies have been used by the researcher which are competitive positioning, product positioning, situational positioning, and perceptual positioning.
- The questionnaire was designed in such a way that the first section was dedicated to the demographic information of the respondents. The subsequent sections were dedicated to the buying behaviour, and four different positional strategies.
- Snowball and Convenience sampling was used for the purpose of identifying the sample.
- The research was carried out on respondents from Pune City. A cross sectional survey design was used in order to conduct the research.
- A Likert scale was used to understand the opinion of the respondents.
- For each of the sections an average was calculated. Percentages to questions under a particular section of the questionnaire were averaged to get a single score for that section.
- The section-wise average score was considered for the purpose of conducting a regression analysis.
- P-values were calculated, and the null hypotheses was checked for rejection or non-rejection.



**Data Analysis****Table 1. Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	14	10.5	10.5	10.5
	26-35	41	30.8	30.8	41.4
	35-45	77	57.9	57.9	99.2
	Above 45	1	.8	.8	100.0
	Total	133	100.0	100.0	

From the above table it can be seen that 57.9% of the respondents were belonging to the age group of 35 to 45 years. 30.8% of the respondents were belonging to the age group of 26 of 35 years. Only one out of 133 women were above the age of 45.

**Table 2. Annual Income**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No income	36	27.1	27.1	27.1
	Up to 2 lakhs	40	30.1	30.1	57.1
	2-5 lakhs	41	30.8	30.8	88.0
	5-10 lakhs	12	9.0	9.0	97.0
	Above 10 lakhs	4	3.0	3.0	100.0
	Total	133	100.0	100.0	

30.8% of the respondents had an income between Rs 2 lakhs to Rs. 5 lakhs. 30.1% of the respondents had an income of up to 2 lakhs. 27.1% of the respondents did not have any income as they seem to be housewives. 9% of the respondents had an income between 5 to 10 lakhs and 3% of the respondents had an income of above 10 lakh.

**Table 3. Occupation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Housewife	45	33.8	33.8	33.8
	Service	58	43.6	43.6	77.4
	Business/ Professional	30	22.6	22.6	100.0
	Total	133	100.0	100.0	

Majority of the women were in services which means that they were doing jobs. 33.8% of the women were housewives. 22.6% of the women were in some business or profession.



**Table 4. Number of months into pregnancy**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2.00	8	6.0	6.0	6.0
3.00	40	30.1	30.1	36.1
4.00	28	21.1	21.1	57.1
5.00	21	15.8	15.8	72.9
6.00	20	15.0	15.0	88.0
7.00	16	12.0	12.0	100.0
Total	133	100.0	100.0	

As mentioned earlier, all the women were between 2 to 7 months into pregnancy. The researcher has thus avoided including the respondents who are very early or very later in their pregnancy.

**Table 5. One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
Products must Contain Specific Minerals and Vitamins that are Required for the Growth of Foetuses	133	3.9699	.86111	.07467
Minimal Artificial flavours and additives	133	3.9098	.93305	.08091
Organic	133	3.9624	.84751	.07349
Nutritional Requirements of the Developing Foetus	133	3.9549	.94440	.08189
Nutritional Requirements of the Offspring Later in Life	133	4.0150	.85267	.07394
Energy-dense and nutrient dense ingredients	133	3.9323	.90617	.07857

The above table shows that all the means are above 3.9. this suggests that the majority of the respondents agree that Products must Contain Specific Minerals and Vitamins that are Required for the Growth of Foetuses, Minimal Artificial flavours and additives should be used. As far as possible the product must be Organic and support the Nutritional Requirements of the Developing Foetus. The current nutrition supplement used must be also able to meet the nutritional requirements of the Offspring Later in Life and they should contain Energy-dense and nutrient dense ingredients. This also proves the first hypothesis that "Pregnant women are more health conscious and more interested in buying nutritional products that exclusively meant for them during the pregnancy period."



Table 6: Desired characteristics of the health supplements:

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
Products must Contain Specific Minerals and Vitamins that are Required for the Growth of Foetuses	2	1.5%	2	1.5%	33	24.8%	57	42.9%	39	29.3%
Minimal Artificial flavours and additives	3	2.3%	3	2.3%	37	27.8%	50	37.6%	40	30.1%
Organic	2	1.5%	2	1.5%	32	24.1%	60	45.1%	37	27.8%
Nutritional Requirements of the Developing Foetus	4	3.0%	4	3.0%	26	19.5%	59	44.4%	40	30.1%
Nutritional Requirements of the Offspring Later in Life	2	1.5%	2	1.5%	29	21.8%	59	44.4%	41	30.8%
Energy-dense and nutrient dense ingredients	3	2.3%	3	2.3%	32	24.1%	57	42.9%	38	28.6%

The above table shows that 42.9% of the respondents agreed and 29.3% of the respondents strongly agreed that the product must contain specific minerals and vitamins that are required for the growth of the foetus. Similarly, 37.6% of the respondents agreed and 30.1% of the respondents strongly agreed that the least number of artificial flavours and additives should be used in such products. 45.1% of the respondents agreed and 27.8% of the respondents strongly agreed that it would be better if the product would be organic. 44.4% of the respondents agreed whereas 30.1% of the respondents strongly agreed that the product should be suitable to the nutritional requirements of the developing fetus. 44.4% of the respondents agreed and 30.8% of the respondents strongly agreed that the product should be good enough to support the nutritional requirements of the offspring in later life. 42.9% of the respondents agreed and 28.6% of the respondents strongly agreed that the energy dense and nutrient dense ingredients must be used in the preparation of the supplements.

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Perceptual positioning, Product positioning, Situational positioning, Competitive positioning <sup>b</sup>		Enter

a. Dependent Variable: Buying Behaviour

b. All requested variables entered.





**Table 6. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.796 <sup>a</sup>	.634	.623	.80556

a. Predictors: (Constant), Perceptual positioning, Product positioning, Situational positioning, Competitive positioning

The R Square value shows that the model has the potential to explain 63.4% of the variance. This proves the second hypothesis that "The impact of positioning strategies on purchase behaviour of pregnant women is significant"

**Table 7. ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	144.094	4	36.024	55.512	.000 <sup>b</sup>
	Residual	83.063	128	.649		
	Total	227.158	132			

a. Dependent Variable: Buying Behaviour

b. Predictors: (Constant), Perceptual positioning, Product positioning, Situational positioning, Competitive positioning

## Conclusion

According to most responders, prenatal supplements should contain minerals and vitamins for foetal development. The producer must ensure that nutritional supplements provide minerals and vitamins needed for foetal development. Most respondents said food goods shouldn't include artificial flavors and additives. The qualified respondent should know if their products include artificial flavourings and/or additives. According to most respondents, FSSAI requires producers to identify food goods as "organic." If a supplement producer wants to name their product as "organic," they must satisfy FSSAI requirements.

Overall, the research also finds that the positioning strategies that are used by nutrition supplement manufacturers also plays an important role in the acceptance and buying behaviour of the respondents. This study provides a method for understanding the relationship between social marketing, the product, and consumer intention to buy.

The results of this study are helpful in identifying the gaps that need to be filled for successful social marketing efforts in nutrition supplements. There was a gap between product promotion awareness and knowledge as to what helped consumers' decision-making process on nutritional supplements. The gap was primarily due to the absence of clear messages from the supplement company that consumers should take nutritional supplements.

A solution might be offered by providing information on how nutritional supplements can



affect consumers' lives positively, through influencing their health status or improving their health condition.

The researcher has made an attempt to suggest some possible ways of addressing this issue. In order to bridge the gap between product promotion awareness and consumers' decision-making process, the supplement producers need to use attractive, clear and simple messages in their promotional and advertising activities. The promotional activities also need to be multifaceted and consistent with other forms of promotion such as packaging, label and target customer segment chosen. Therefore nutritional supplement manufacturers should consider conducting experimental studies on increasing their effectiveness in promoting their products by examining the factors that affect the overall effectiveness of social marketing campaigns. They should also conduct a more in-depth study on consumers' decision-making behaviour for either buying or not buying nutritional supplements.

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## RESILIENCE IN CYBERSPACE WITH DATA ANALYTICS FOSTERED KNOWLEDGE MANAGEMENT CAPABILITIES: A DISCOURSE FOR SUSTAINABLE IMPLEMENTATION STRATEGY

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### ABSTRACT

In the Cyber world today managing threats dynamically, is challenging, moreover generation of knowledge and enhancing knowledge management (KM) capabilities is becoming crucial due to the dynamics of technological advancements. In this context a regulatory mechanism is essential; this resilience required is achieved through data analytics which bridges the gaps between the challenges faced in cyber space and implementable realistic solutions.

Along-with the technological advancements it becomes imperative to optimally utilize and align knowledge management capabilities. A need was foreseen to reconsider KM capabilities in the fields of computer security, data management, also legal and risk management. The researchers have attempted to work on the aspect of sustainability, in handling challenges and solutions in implementing effective cyber security and in building better KM infrastructures; through innovative enabler such as Data analytics. In the proposed effort to elaborate this review study, assessment and quantitative analysis is recommended.

**Keywords:** Knowledge Management Capabilities, Cyber Security, cyber threat management, Data Analytics.

### Introduction

In today's highly competitive world, IT infrastructures are preferred to be equipped with Cyber security mechanisms to curtail down the cyber threats. Protecting sensitive data, computer systems, networks and software applications from cyber attacks generates a large amount of data which can be analyzed substantially to form information security resources for better knowledge management around cyber security. Such protecting mechanisms are used by individuals and enterprises to deal with the challenges such as tampering and/or unauthorized access to vital resources and other computerized systems. Every organization has these important resources which are called as intellectual assets that include hardware, software, and data. With the continuous increase in the number of cyber threats and its effects on the organization due to the complexity of the cyber attacks; organizations are struggling to protect the information in an upcoming highly dynamic business environment. It has become essential and important to secure the intellectual assets including digital processes, information and IT systems from tampering systems and data stored within, exploitation of resources via attacks. These intellectual assets should be legally protected to achieve security of confidential information of an organization such as source code, solution manual, executable, live databases of clients, passwords and other confidential information stored on servers, financial data, and employee details etc.

The security of organization's data has become inevitable for the effective management and utilization of information generated by an organization as all organizations are driven by technology and technology is evolving very dynamically. The systems that are not aligned in coordination with information security mechanisms and policies may result into challenges such as unauthorized access, user authentication concerns, hacking, virus and worm dissemination, intrusion into company's private network and so on. People and group of people, that is employees and teams; work for an organization using intranet and extranet. Intranet is a type of network in which data and information is shared and is circulated within the organizations confined area. Extranet is nothing but company's private network at different locations where in data transfer and information sharing happens from one location to the other using virtual private networks.

### Gap Analysis and Problem Description

With the rapid advancements in the technology and possibility of successful yet undetected cyber-attacks, organizations must adopt innovative methods, to derive dynamic strategies to manage threats effectively. This can be done seamlessly without loss of credibility, value and security of information which is managed by an

  
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organization and used in several ways and formats. Managing upcoming threats dynamically have become extremely challenging, wherein data analytics and algorithms enabled in generating knowledge and enhancing knowledge management capabilities thereby propagating a need of a resilient solution.

Cyber threats are one of the key areas where concerns related to ransomware attacks, crimes related to upcoming technologies such as Artificial Intelligence (AI), Internet of Things (IoT), Robotics, blockchain etc., electronic commerce and mobile commerce related cybercrimes, financial frauds, etc. should be addressed. To improve the privacy and security when the information is in transit or the information is stored on hardware devices is becoming very crucial for the organizations. While analyzing the access mechanism and information during transmission; authorization becomes necessary and important in context to the security breaches, through openly accessible lines and with the help of ever-growing cyber attacking tools. It is seen that corporate networks can become vulnerable to cyber threats at larger extent. There are potential perpetrators at several points of penetration making the data at various levels of confidentiality vulnerable to intruders compromising the integrity of data. Email security and security of information stored on cloud and other networks is becoming more susceptible to attacks and companies need to be geared up with processes in place to address cyber-attacks. The prevalence of ransomware attacks and increased use of internet enabled applications is leading to the risk to networks and information stored at servers.

#### Literature Review and Objective of the Research Study

(Masike, 2023) Security in all aspects of hardware, software and data are crucial for the management of policies, mechanisms at an enterprise level. (Samtani, Zhao, and Krishnan, 2023) To produce secure environment in the organizations, development in technologies like AI is beneficial for the implementation of secure knowledge management. Furthermore, in context with cyber security related tasks such as anomaly detection, vulnerability detection, bitcoin fraud detection, as well it is valuable.

(Ciasullo, Montera and Douglas, 2022) Big data analytics capabilities are fostering the opportunities for SME to identify tangible and intangible resources and infrastructure and ways and mechanisms to protect them from cyber-attacks.

(Zwilling, Klien, Lesjak, Wiechetek and Sklodowska, 2022) For effective cyber security controls awareness must be incorporated and should increase in the developing countries to avoid data loss and information retrieval challenges.

(Sandor and Tonj, 2021) To deal faster with the information security issues at the business enterprise level, the KM capabilities address the cyber security issues regarding organizational processes. The implementation of cyber security from KM perspective will help better identify risks, threats, and vulnerabilities and to create and maintain secure environment.

(Kapur, 2020) For every individual, it is important to enhance knowledge in terms of augmenting the abilities consciously. Providing right information at the right time securely is nothing but a knowledge management. Cyber security ventures (2020) powered by reviews for business by Finance Online, the computer ransomware i.e., hacking had been causing havoc to businesses and people worldwide. Organizations are considering ransomware as a biggest threat and a challenge to be addressed on highest priority, as it is fast growing, with damages predicted to be 57 times higher by 2021.

(Cyber edge 2020 cyber threat defense report, 2020) the frequency of successful cyber-attacks (at least one successful attack) is increasing year by year giving heads up for designing a framework. this can be implemented for aligning knowledge management capabilities with the help of data analytics as a tool. the technological advancements in attacking strategies have also been impacting continuously which is resulting into successful attacks as shown in the figure below.

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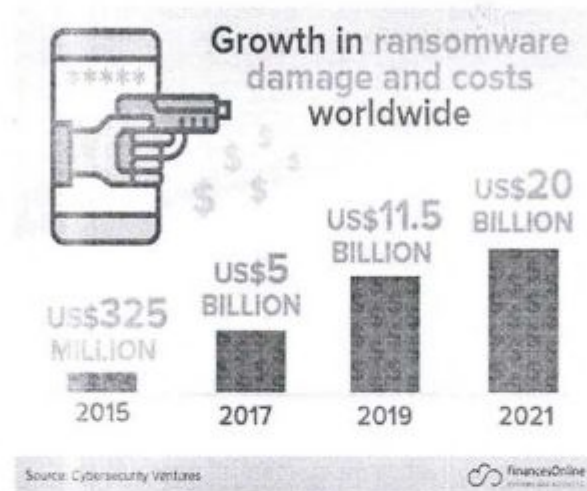


Figure 1: Growth in ransomware damage and costs worldwide (Source: Cybersecurity Ventures; FinanceOnline, 2020)

This initial study aimed in fostering the knowledge management capabilities, in context of cyber threat management through data analytics; thereby bridged the gaps between challenges faced in cyber space and implementable resilient solutions. The strategic level capabilities of every organization are highly based on its domain specific environment.

(Obitade, 2019) The link between the KM capabilities and superior cyber protection is nothing but a data analytics which is important for the success of every organization.

(Jenab and Moslehpour, 2016). The cyber-attacks are growing day by day causing corporate espionage, threats to intellectual assets of every organization as well as it is impacting at an individual level.

Wang and Wang (2016); stated the differences between traditional enterprise information systems and KMS stating the data analytics methods and models that facilitates the knowledge management implementation. From the various studies carried out; it became imperative to address the everchanging cyber security challenges in context of the business environment as well as technological advancements. To optimally utilize and align knowledge management capabilities in these perspectives, there was a need to consider knowledge management and its relevant tools and techniques; in the context of computer security, data management, also legal and risk management.

The researchers have further attempted to explore how data analytics can be an enabler in identifying challenges and solutions in implementing effective cyber security and in building better knowledge management infrastructures. To sustain in this hyper competitive and data sensitive digital era, securing wealth of data gets vital precedence, using KM Capabilities through advanced proven analytics have acknowledged the case. Further assessment and supportive quantitative analysis are recommended in the proposed effort to elaborate this review study to the next level.

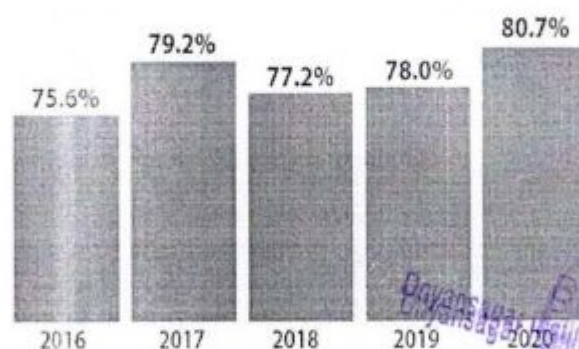


Figure 2: Percentage compromised by at least one successful attack by year. (Source: CyberEdge 2020 Threat Defense Report)

In order to enhance the Knowledge Management [KM] capabilities of an organization, a holistic consideration of technical, structural, social, and cultural aspects of any infrastructure of a business enterprise is inevitable. Cyber threat management leads to a specialized organizational structure to follow best practices across the





interorganizational tiers. To address these concerns from multidisciplinary perspective, a thrust for some strategic model as alternative solutions becomes imperative supplementing it with innovation.

The flow of information in business organizations comprises of various knowledge forms that needs to be modelled to emphasize its relevance and context due to its ever-evolving nature. Thus, the elicitation process that stores, manages, and transforms knowledge in a cyclic manner is understood as Knowledge Management which is central focal point. Moreover, KM for cybersecurity domain should have well defined objectives and measures to assess the effectiveness of KM capabilities. Almost all large organizations invest considerably in digital and IT solutions, and specifically in analyzing challenges and risks that can be faced by any organization. The data analytics can be an enabler of superior performance and act as a facilitator to leverage these capabilities. This study will also help in finding practical solutions in implementing effective cyber security and in building better knowledge management infrastructures.

### Considering Significance of Knowledge in a Cyber Space Scenario

The digitized world today, which is established on network of internet-enabled systems, is vulnerable to the risk of losing data integrity in the cyberspace. As a strong protective shield, Cyber threat management demands an integrated cyber risk identification and management approach to address and mitigate the cyber security risks and threats in the cyber space. Configuring an effective threat defense mechanism also deals with data acquisition and leveraging automation. Also, depending on the domain in which organization is working, relevant analytics and cross correlation across the vast domains of Cyber security can be analyzed in context to technological advancements.

Considering illustration in this given diagram (Figure 3); the progressing learning evolution shows transition of raw data into the most critical form of evolved data as wisdom. We realize evidently through this info-graphic representation that wisdom is the knowledge applied in action.

The transformation is resulting in better version of data after iteration of the depicted steps, with context and relevance that can be applied using innovative approaches to manage the knowledge intensive environment.

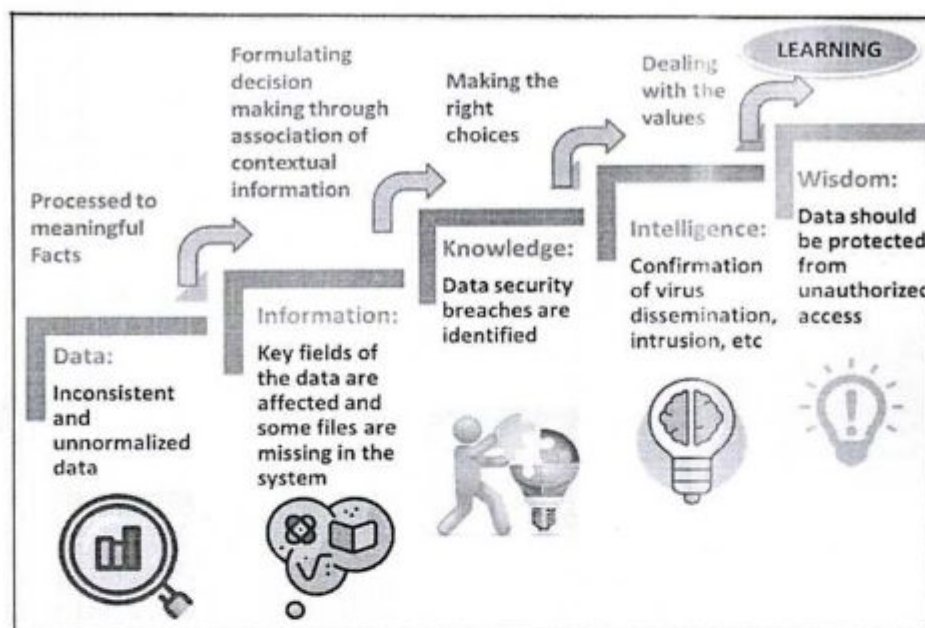


Figure 3: Model of Learning Evolution and Locus of The Knowledge (Figure Template Adapted from Shikhare, 2013)

Data, information, and knowledge are comprehensively used interchangeably, although they differ in their context and nature of usage that gets in a different form rising its relevance and utility. The researchers attempted to comprehend the progressive data with reference to the cyber wisdom which is evolved being depicted in this info-graphic representation with intuitive illustration in the above diagram (Figure 3) Model of learning evolution and Locus of the knowledge.   
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A framework is often used by cyber security teams in any organization to manage the life cycle of a threat to identify and respond to it with speed and accuracy. A smooth integration between people, process and technology in the cyber threat management is an important aspect to continuously identify the risks beforehand and stay ahead of potential threats. The under researched areas include: faster threat detection with lower risks to intellectual assets and reliable investigations at regular intervals with optimal response time. On one side, ongoing digitization of business processes is giving many benefits, at the same time it is posing cyber threats and challenges in the digital world on the later part. To secure the confidential assets and to maintain the integrity of data, appropriate security policies and mechanisms should be implemented and refined from time to time to address upcoming new types of cyber threats and challenges effectively. An effective Cyber threat management has the potential for continuous improvement. This can be achieved through a built-in strategic plan with innovation and process measurement with the help of data analytics and reporting mechanism in the emphasized KM environment.

Cyber threat management is important to organizations to understand, aggregate and resolve the potential cyber security challenges that need closer attention in context to new emerging data risks. Nevertheless, it demands the collaboration between employees, business process and technological advancements, giving organizations the valid opportunity to detect threats in early stage and respond immediately with the aid of certain analytical tools.

### **Exploring Data Analytics as a Tool in Enhancing the KM Capabilities**

In the fast-paced world today, several organizations desire to use the available and evolving data for gaining strategic advantage and they are geared up for competing by making best use of analytics. Past two decades has witnessed Knowledge Management term being coined and widely used in the highly data-oriented environment, wherein huge data is evolved and disseminated. Moreover, businesses are highly evolved based on knowledge-based economy, which is so dynamically affected by several factors within and outside a business enterprise. As we can see the Covid19 pandemic today has completely ruined the global economies, across all the sectors; cyber threats have emerged as additional challenges that is further hampering the broken systems. The churning of knowledge that is the core of the organization has tremendous potential to either elevate or collapse any system (if not configured and managed); and thereby threaten an empire of business in the context of this competitive realm of business ecosystems.

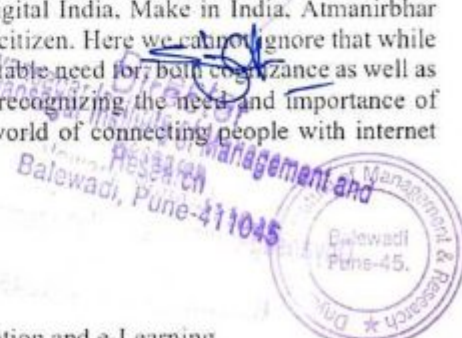
Recent studies (Moon and Lee, 2014) have concluded that culture and knowledge sharing processes contribute to knowledge management (KM) effectiveness. Business organizations view knowledge as their most valuable and strategic resource for achieving sustainable competitive advantage (Davenport and Prusak, 2000). There have been inhibitions to share knowledge due to the behavioral factors on various levels of knowledge elicitation; causing hindrances in utilizing its fullest potential of KM capabilities for the growth, business development and sustainability.

### **Understanding Knowledge Management Capabilities**

To compete effectively, firms must leverage their existing knowledge and create new knowledge that favorably positions them in their chosen markets. In order to accomplish this, firms must develop an 'absorptive capacity'—the ability to use prior knowledge to recognize the value of dynamic information, assimilate it, and to apply it to create new knowledge and capabilities.

(Gold, Malhotra and Segars, 2001) have developed a model of km based on the capability's perspective. They referred to knowledge infrastructure capabilities and knowledge process capability to achieve organization excellence. Wherein, further knowledge infrastructure capabilities can be considered from three key infrastructure capabilities—technical, structural, and cultural—that enable the maximization of social capital (intangible capital). The researchers have taken the traces from this model and attempted to put forward adaptive model of km capabilities adding innovation as another strategic capability; based on the strong deliberation of cyber threats and challenges. The km cyclic process model itself is mapped with the second part of the proposal relating to knowledge process capability.

Furthermore, in this paper the researchers have also thought of data analytics as a probable tool to address the challenges stated so far in this paper; as it is observed that huge data is being churned worldwide in this digital era. The classic reference would be the drives in Indian context such as Digital India, Make in India, Atmanirbhar Bharat which is enabled on the pillars of digitization literacy among the citizen. Here we cannot ignore that while being part of these drives, common man has now realized about the inevitable need for both cognizance as well as usage of digital technologies. Nevertheless, the common man is now recognizing the need and importance of being part of the cyber space with more wisdom and caution in this world of connecting people with internet enabled organizations.





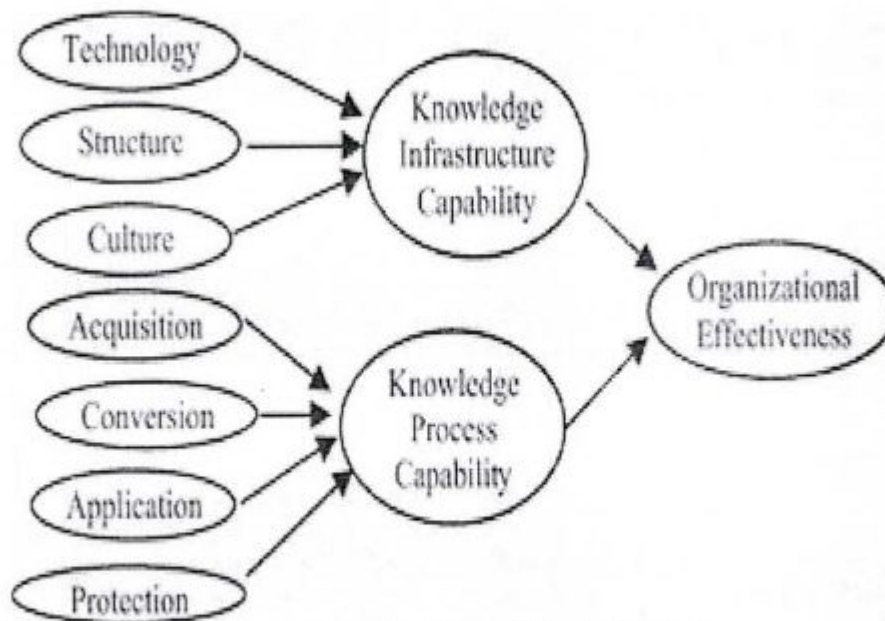


Figure 4: Model of Knowledge Management based on Capability's Perspective

(Source: Knowledge management capabilities and organizational effectiveness; Gold, Malhotra and Segars, 2001)

In context to Indian scenarios, the self-reliant India [Atmanirbhar Bharat], Digital India and Make in India are the drives envisioned to support India innovators and business leaders including startups and big organizations. To make India a global technology superpower, digital literacy has been introduced to a citizen that includes awareness about electronic commerce, electronic governance, mobile commerce, and use of technology for services and business management. If we take a closer look at the progress, current status and challenges of these initiatives, a common man has been benefitted bringing a measure of digitization in every aspect of life; right from education, finance, trading, marketing, managing resources to commerce and governance. These initiatives were meant for reviving the infrastructure for the sustainable self-reliant growth and for identifying the challenges faced by business leaders and organizations.

The need and importance of being a part of a cyberspace gave rise to being more cautious and aware about the cyber threats and challenges while using digital technologies. The number of internet subscribers is increasing day any day worldwide and it is a clearly identifiable and visible indicator of digital transformation happening across the globe. As a result of increased usage of smart phones and internet enabled devices, huge data is at the disposal of cyber offenders, resulting in cyber threats are also emerging at a huge speed. The role of social media platforms, wireless technologies with high bandwidth, internet service providers, and private sector companies like Google, Facebook, Reliance Jio, etc. cannot be ignored in the worldwide digital evolution.

In order to manage the dynamic data and the cyber threats and challenges the new component proposed by researchers as Innovation, can play significant role. It can be noted that this innovation in the form of strategic capabilities of Knowledge management can be used to mitigate the risks of cyber threats and deal effectively with the challenges at all the levels of organization. The analysis of data flowing from and into the organization should be studied in an innovative way, so that a strategy can be built for the sustainable growth of an organization in this highly competitive and fast-growing technology driven cyber space.

With this rapid growth of both Internet and digital world around, traditional Knowledge management systems and its capabilities may fall short to manage the real time highly volatile data churning, as there would be newer lethal cyber attacks that can as well keep on rising. Advancing internet connectivity and competition across market players, high speed network dependencies, mobility of information is happening at rapid pace. In parallel, we see remarkable growth of various social media platforms, data capturing technologies, etc. giving a tenacity to propose improved capabilities of techniques, tools, technologies, and methodologies.

Big data and data analytics these days have come a long way proving effective in managing both data storage utility, security, and the data integrity requirements in the real time. To elevate the business performance among the several factors to seize the upcoming opportunities and curtailing the threats; moreover, deal it strategically in the real world becomes the stepping stone of all the levels of organization. The small and medium size companies



are also using business analytics today as a business decision making tool not only to enhance business operations and managerial efficiencies but also to improve the customer experience in the competitive marketplace (Rajagopal and Ramesh Behl, 2016). May it be micro or small startup or a well-established matured techno giant, flourishing their business on the planet; every enterprise should be built up on a framework strengthened by Knowledge Management capabilities.

In the given current scenarios, we find data in several variants extensively used and progressively transformed within business systems and heterogeneous environment. It becomes need of the hour to cater the customized requirements and transmitting constraints over World Wide Web (WWW); making it a strong case to apply the data analytical abilities strategically. This foundation gives a thrust to basis the decision-making process elevates business performance and thereby achieves business excellence in a long way. It is obviously necessary to be proactive in our approach rather than reactive whenever there is a concern of data security infringement and many such breaches. Better approach that is more agile and preemptive in nature, would at the same time demand better and stronger support systems for back end complimented with better tool kit to fetch it as and when it is used. Massive data usage with emergence of better technological advancement and secured storage demand is seen; and these systems overall would be more prone to the risk of cyber attacks.

We all see today that Internet is anchoring decision making process in core business activities. More mature and strategic decision-making tools would act as a catalyst to leverage the data creation, elicitation, assimilation, and various other processing and managing needs; in the dynamic environment. Not limited to just IT sector but almost every other non-IT sector as well is having data intensive and data critical processes that demands a new framework of enhancing the existing KM capabilities and blending them with innovative strategic moves. This will facilitate in taking policy decisions that are pragmatic and applying them to gain control over the business with such well thought of architecture, supporting the data security aspect as well. These solutions need to be full proof, agile as well as cost effective and easily integrated in the existing systems in every industry which is nowadays technology driven. And technological advancements are continuous and never-ending phenomenon in the cyber world so is their demand and utility. Such proposals have been put forth by many researchers as to how big data addresses these concerns to improve the cyber security in an information technology enabled environment on a greater extent, by supporting the KM capabilities. Business Analytics and Cyber Security Management in organizations compiles innovative research from international professionals discussing the opportunities and challenges of the new era of online business. (Rajagopal and Ramesh Behl). Business analytics techniques, strategies for data storage, and encryption in emerging markets that are identified and highlighted by the professionals and experts needs to be boosted by further more innovative ideas and value adding frameworks that are more technology driven. Above all, the components of such frameworks need to be measured against the effectiveness of the digital world and thereafter the holistic evolved model be validated for further work and research.

The classic example of measuring effectiveness of digital transformation is work culture adopted worldwide by different sectors for their business continuity during lock down period due to pandemic situation of COVID19. Many organizations are opting for work from home, working remotely partially or in a full-fledged manner. Connecting over online business meetings and taking strategic level decisions using a technology mode at an operational level and increasing productivity by working from home is becoming a new normal. But this has also led to uncertainty of jobs and unemployment, leading to inclination towards committing financial frauds and serious cybercrimes like hacking and intrusions into the corporate companies' private and confidential information.

The increasing cyber threats have given an indication to the organization to really focus on protection of their assets by implanting suitable strategies with the help of innovative policies and mechanisms.

#### **Contribution to the Body of Knowledge [CBOK]**

To excel knowledge management capabilities, there is a need to acquire knowledge and skills in the fields of cyber security, data management and strategically managed risk management. Knowledge management capability (KMC) is an organizational mechanism to create knowledge continually and intentionally in organizations (Von, Nonaka and Aben, 2001). In addition, (Gold, Malhotra and Segars, 2001) proposed knowledge management (KM) infrastructural capabilities and process capabilities as direct determinants of organizational effectiveness (Figure 4); they argued that an organization must leverage its existing knowledge management capabilities and apply the knowledge in its operations to sustain competitiveness. Taking clue from this basic work done, the researchers are proposing additional vital components of Innovation comprising Strategy and Policy perspectives to the model of Knowledge Management capability; complimenting the Knowledge Management cycle comprising the cyclic processes powered with data analytics; in context to the research scope of this paper. They intend to take it further





validating the model and considering this effort for their empirical studies in the same area of research study. Here apart from Physical infrastructure and organizational hierarchy the other aspect which is the crucial interface is the technological framework that helps to mobilize the social capital in the process of knowledge elicitation. Information technology is often cited in the literature as an important KM infrastructural capability, enabling or supporting core knowledge activities such as knowledge creation, knowledge distribution and knowledge application. (Gold, Malhotra and Segars, 2001). Considering the research focus on management of the cyber challenges and threats it becomes imperative to have its impetus; both with the outcome perspective on the study undertaken and its influence on the overall Knowledge Management environment considered here in the study. Thus, another important aspect as per the researchers along with Culture, Organization structure and Infrastructure is Innovation which forms the newly introduced fourth component as one more pillar shown in the diagram (Figure 5). This innovation has its scope encompassing the policy and strategic perspectives that may be required to apply as per the framework of Cyber space and as per unanticipated threats that may occur in real time. This results in putting the system into more challenging circumstances, directly compromising the security and integrity of intellectual assets of an organization or at individual level.

**Outcome of the research study**

The researchers have proposed a conceptual framework, in which they have taken efforts to foresee how data analytics can be an enabler in identifying cyber threats and challenges. To overcome these challenges, exploring solutions in implementing effective cyber security and in building better knowledge management infrastructures is another area where the researchers have been working. The Knowledge Management capabilities namely: [organizational structure (comprising people/teams)] as one pillar; other pillars proposed in the model (refer figure 5) are [infrastructure (comprising physical/technological)], [innovation (comprising strategy/policy span of scope)] and [culture (comprising techno-socio aspects)].

As deliberated (2013) in research study; any Knowledge Management enabled Systems (KMS) implemented within an organization it requires a systematized framework to enrich information management; wherein Knowledge Management acts as a multidimensional mechanism that works at all levels of the business pyramid. This includes self-growth and performance elevation at individual level, peer-to-peer knowledge sharing at group level and diffusing best practices at workplace level which promotes better organization at every functional level. In this context cyber security becomes significantly complex and essential for managing challenges such as loss of data, preventing intentional sabotage, hacking, unauthorized access, intrusions, etc.

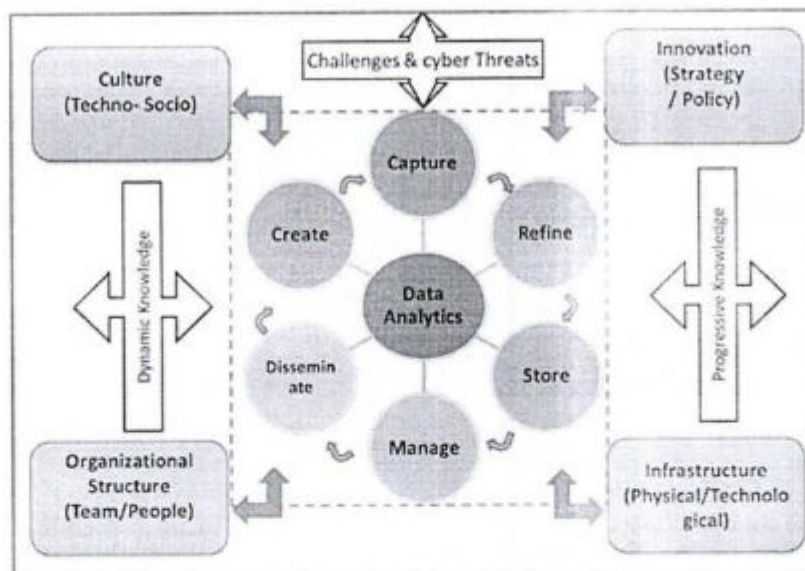


Figure 5: Proposed Model: Enhancing KM Capabilities driven by Data Analytics to manage Cyber security challenges and threats (The researchers' original contribution to the body of knowledge)

**Utility of the Research Study**

A step-by-step systematized effort with innovative approach in applying certain business strategies and policies is recommended. This may prove to be illustrative model for successful integration of the knowledge forms and processes at different levels within an organization. Data Analytical abilities managing the core KM cycle, under the purview of KM capabilities proposed; can be a model not limited to the elicitation process of progressive and dynamic knowledge. This model as well can be a supportive advanced mechanism in dealing the cyber challenges and protecting from cyber threats as it is empowered by Data analytics. Moreover, to sustain competitive



advantage that is affected due to rapid technological advancements, it is becoming crucial for the organizations to empower KM capabilities with data analytical approach. The very nature of knowledge being vibrant, this proposed model addresses the knowledge elicitation process considering cyber threats and challenges and also to regulate progressive knowledge with disciplined data analytics. The data analytics can as well be an enabler of superior performance and to leverage these capabilities, almost all large organizations are seen investing considerably in IT solutions. This data analytics driven approach has given a thrust in analyzing challenges in regulating effective cyber security and in building better knowledge management infrastructures.

### Concluding Reflections

World is going to keep advancing and so are the new challenges that threaten the precious knowledge. Thus, such vulnerable data and networks (including extranet and intranet) would need stringent mechanism to address and resolve not only the anomalies but as well defend the cyber attacks. Traditional model may form a basis of any resilient solution that is being proposed. Newer and better routes need to be evaluated and verified complimenting the legacy systems; to address the invading threats to knowledge in the cyber space. Data analytics fostered KM environment, comprising the major pillars of KM capabilities; having strategic innovative support; will keep the KM Cycle in equilibrium.

Techno-socio culture being vital part of corporate environment along with innovation with respect to KM capabilities proposed in this research paper, has a great influence in the cyber space giving impetus to align systems with proper analytics. This has inspired the researchers for the suggestive model that addresses fostering the KM capabilities there by managing the cyber security challenges and threats effectively by virtue of data analytics. This review study formulates the basic building block as initial step, to instigate elaborative research work. This may include validation of the model proposed here; with quantitative analysis and well-defined scope of the further study.

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## **A LITERATURE REVIEW OF CYBER SECURITY ADOPTION IN AUTOMOBILE SECTOR: WITH SPECIAL REFERENCE TO AUTONOMOUS VEHICLES IN INDIAN CONTEXT**

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### **ABSTRACT**

Technology is progressing rapidly with the intent to have higher performance, scalability, and accuracy. Security which often used to take a back seat now has become prevalent in terms of maintaining integrity, confidentiality, and authentication of the information. An automobile sector is also adopting exponential and transformational technologies and vehicular networks. Cyber security in this sector is becoming challenging for the organizations to come up with optimal solutions. The growing emphasis on OEMs [Original Equipment Manufacturers] on autonomous driving and connected car systems have increased the risk of data breaching, thus augmenting the demand for cybersecurity solutions in the automotive market.

The researchers attempted to explore the connotation of decision models for cyber security implementation in automobile sector. The literature study undertaken revealed that; while positioning and fostering the technology-equipped integrated solutions for the cyber security implementation in the automobile sector, the decision models will play a vital role. The study of cyber challenges becomes more evident, predominantly when vehicular networks are used in autonomous vehicles. Furthermore, in the current scenario, the inevitable impact of cyber attacks, upcoming known and unidentified threats will imply the necessity of application of appropriate cyber security measures and controls is the major scope of the study.

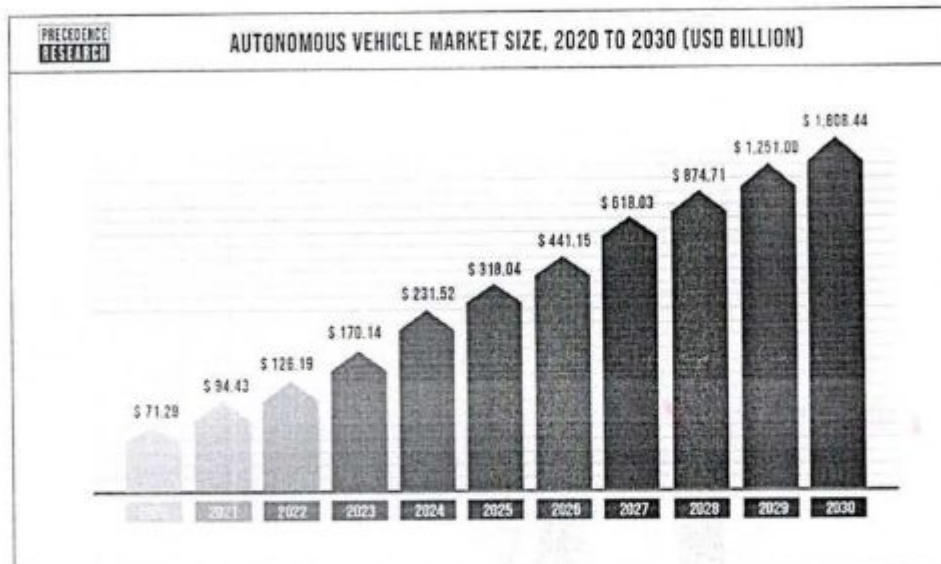
**Keywords:** Cyber Security, Automobile Sector, Vehicular Networks, Autonomous Vehicles, Decision Models

### **Introduction**

The automobile sector in India is one of the largest industries in the world although autonomous vehicular technology is recently evolving but with a promising future. An autonomous vehicle or a self-driving vehicle is self-operated, technology-controlled owing to its ability to sense its surrounding. Such vehicles use strategic decision models based on advanced exponential and transformational technologies. According to the study by McKinsey (2017), consumers across the globe have expressed interest in hybrid and electrified vehicles equipped using technological evolutions. The public consciousness is impacting the use of high-end vehicles with inbuilt features such as automation and digitization etc. The newer ways of mobility using AI and algorithm-led systems to drive innovations such as self-driving cars and drones are revolutionizing the automobile sector across the globe.







Graph 1: Autonomous vehicle market size  
(Source: <https://www.precedenceresearch.com/autonomous-vehicle-market>)

The global autonomous vehicle market was estimated USD 94.43 billion in 2021 and it is projected to hit around USD 1808.44 billion by 2030, poised to grow at a compound annual growth rate (CAGR) of 38.8% from 2021 to 2030. Autonomous vehicle market is being evolved gradually with technological advancement may be at a rapid pace, yet mass deployment not gained the desired momentum as on today. (Rajasekhar and Jaswal, 2015).

A developing country like India, is witnessing a shift in mobility trends with technological innovations and the consumer expectations from automobile manufacturing companies. Nevertheless, in Indian context the application of automation and digitization in vehicular networks is gradually gearing up.

As modern vehicles can establish communication between the vehicles that is vehicle-to-vehicle and vehicle-to-everything; automotive security threats must be well-thought-out and addressed. Vehicular networks are largely susceptible to cyberattacks such as eavesdropping, jamming, spoofing, man-in-the-middle attacks, compromising the security of control layer and navigation related aspects. (El-ewini, Sadatsharan, Selvaraj, Plathottam, Ranganathan, 2020)

To provide a better cyber security to autonomous vehicles, it is imperative to follow certain strategic process in terms of implementation as design decisions or decision models for strategy building or policy making. There are challenges as technology is evolving with an exponential speed and consumers are in a great demand of evolutionary autonomous vehicles. (Li and Liu, 2021). The world-wide organizations like Tesla Inc, Volkswagen AG, ABB, Magna International, General Motors, Uber, Waymo are some of the famous autonomous vehicles driving companies. In Indian context Tata motors, Mahindra & Mahindra, Hindustan Aeronautics Ltd. Are some of the key players working on the functionalities of autonomous vehicles and vehicular network in coordination with components makers such as Bosch, Continental, and Delphi. The start-up such as minus zero is coming up as first company building affordable fully Self Driving Cars in India.

#### Objectives of the study

1. To review the available secondary information related to the cyber security implementation and threats in vehicular networks.
2. To identify the challenges in making strategic decisions related to cyber security adoption in autonomous vehicles in Indian context.

#### Scope of the study

The chosen area of research being critical, sensitive and complex, it is having vast scope beyond this paper leading to the doctoral research work undertaken.

The scope of this research paper has been kept limited for carrying out the literature review thereby, identifying the gaps and problem statement; that led to confirmation of the title of the research study. The geographical scope of the research work has been confined to the Indian context.





### Literature Review

Cyber security adoption in autonomous vehicles is one of the upcoming research areas. A thorough literature review has been the strongest base considered by the researchers for exploring the context of the study undertaken. This being one of the key areas among various technological innovations in autonomous vehicles.

#### Cyber Security Adoption in Automobile sector

While positioning and fostering the technology-equipped integrated solutions for the cyber security implementation in the automobile sector, the decision models will play a vital role. Decision science utilizes a variety of tools which include models for decision-making. Establishing the criteria for evaluating and adopting appropriate and best alternatives will aid in implementation of the strategic decisions to be made for vehicular cyber security. The decision models based on hardware, software and services which are an integral part of upcoming automobiles will help in making technology management related strategic decisions and the impact can be studied. (Wang, Qin, Wang, Ji, Zhang, Wang, 2021).

#### Autonomous Vehicles in Indian context

Yadav, Kumar, Kumar, Yadav, (2022), proposed that; Indian automobile industry has historically been one of the prominent indicators of the growing economy along with the technological advancements. However, in context with autonomous vehicles and related networks developing globally at a rapid pace, the Indian counterpart has been a little sluggish. Wherein, until recently where Minus Zero got introduced as India's first startup, building affordable fully Self Driving Cars in the country in 2021. The new era of Autonomous vehicles is giving rise to a concept for an integration of self-driving vehicles into Industry 4.0 revolution leading to industry 5.0 technology evolution.

According to the study done by Technvglobal about what is new for the Automotive Industry, India is gradually on the path of becoming a global automotive industry hub with more than 30 automotive R&D centres. As a result of the increase in R&D services in India, the connected car market is projected to grow exponentially by 2025. The in-vehicle connectivity and cyber security adoption in autonomous vehicles will become the default demand for car drivers in the coming years, which will lead to an increase in the number of connected cars to 250 million by 2022.

With the aggressive global automobile market rising, there has been a massive growth in the consumer market giving thrust for innovative solutions to the cyber threats in vehicular networks specific to self-driving vehicles. In this context, cyber security of such vehicles that are imitating human capabilities becomes inevitable.

Gupta, Iyer (2018) revealed that in India, the market for autonomous and connected vehicles is just coming into existence and beginning to display signs of future potential. Soon, most automobile manufacturers will have to consider the advanced features leading to embedding software in their vehicles to manage the complex system of hardware such as sensors, processors, and storage devices. It is important to develop a clear and time-driven strategy for embracing digitization, big data analytics, and connectivity to build and manage the integration of new technologies. Ensuring cyber security mechanisms for secure communication between connected vehicles is essential for the predicted growth in this sector.

Bimbraw (2015) investigated that Autonomous vehicles should be developed as efficient and practical vision guided vehicles. Indian Car buyers top the list when it comes to being open to increased vehicle connectivity. The research has claimed that 80% of Indian customers think that increased vehicle connectivity will be beneficial in the long-term. One of the largest car markets in the world, India ranks first in data collection related to connected vehicles.

Kim, Kim, Jeong, Park, and Kim (2021) deliberated that the Indian connected car market is expected to grow at a CAGR [Compound Annual Growth Rate] of 20% during the period 2020-2025. Since the connected car requires access to the internet for smooth functioning, many players are planning to launch their connected cars in India, and have collaborated with telecom companies to make their connected cars a reality in the Indian market. India is targeting of becoming an all-electric nation by 2030, where a mass production of connected cars is being considered. The Indian Government has mandated the presence of connected services for public transport that came into effect in April 2018. Industry 4.0 revolution leading to Industry 5.0 has expanded the possibilities of digital transformation in automotive and Research and Development is becoming an important aspect for the hybrid and electric vehicles, connected as well as autonomous cars.

Bernardini, Asghar, and Crispo (2017) explored that, the digitized world today, which is established on network of internet-enabled systems, is vulnerable to the risk of losing data integrity in the cyberspace. As a strong



protective shield, Cyber threat management demands an integrated cyber risk identification and management approach to address and mitigate the cyber security risks and threats in the cyberspace. Configuring an effective threat defence mechanism also deals with data acquisition and leveraging automation. Also, depending on the domain in which organization is working, relevant analytics and cross correlation across the vast domains of Cyber security can be analysed in context to technological advancements. Since it is nearly impossible to guarantee that there are no logic errors in any complex computing system, every vehicle is likely to contain at least some vulnerabilities that a skilled attacker may be able to discover and exploit. Based on the deterministic nature of these systems, understanding the possible permutations in advance, and blocking any instruction calls that were not projected can prevent in-memory attacks.

Martínez-Díaz, Soriguera (2018) studied that, as managing upcoming threats dynamically have become very much challenging, data analytics and algorithms helps in generating better solutions to provide safe communication and connected environment in the autonomous vehicles. Identifying appropriate decision models aligning them for the implementation of cyber security solutions, in the context of cyber threat management thereby bridging the gaps between challenges faced in cyber space in context with autonomous vehicles and vehicular networks in an automobile sector. and implementable realistic solutions.

Li, Shu, Chen, and Cao (2021) proposed that all organisation's strategic-level decision making processes are highly based on its domain specific environment. It became imperative to address the ever-changing cyber security challenges in the context of the business environment as well as technological advancements in an automobile sector. The alternatives available in decision models which can assist in provide secure communication among the autonomous vehicles play an important role in providing sustainable growth in these perspectives to optimally utilise and align decision making models in adopting cyber security solutions, there is a need to consider relevant tools and techniques for making effective decision making; in the context of computer security, data management, also legal and risk management. The researchers have further attempted to explore how decision-making models can be an enabler in identifying challenges and solutions in implementing effective cyber security and in building better and cyber secure infrastructures in autonomous vehicles. To sustain in this hyper competitive and data sensitive digital era, securing wealth of data gets vital precedence, using decision science Capabilities through advanced proven analytics have acknowledged the case.

The diagram below depicts the key touchpoints for connected car security. The future of mobility systems will majorly include the infotainment systems, integrated vehicle security, connected vehicles services, vehicle communication busses and use of mobile applications, firmware, and wireless communications.

The ever-expanding cyber security issues must be addressed which can further cause availability, integrity and confidentiality problems leading to vulnerabilities and cyber attacks on vehicular networks.

  
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Figure 1 : Connected car security touchpoints  
Image source: Deloitte analysis (<https://www2.deloitte.com>)

Following are the examples of possible cyber threats in autonomous vehicles:

**1. Insider's threats**

Attacker uses their authorized access to an organization's data and resources to impair the vehicle's information, networks, equipment, and systems. Insider's threats include unauthorized information disclosure, industrial espionage, degradation of resources, sabotage, introducing malware or ransomware attacks and cyber terrorism, etc. Connected and self-driving vehicles are more susceptible to such kind of attacks. (Masike, 2023).

**2. Dumpster diving for data**

Organizations are not keen about discarding the documents and other media without shredding or properly destroying them. A sensitive information can be retrieved from searching through such discarded dump which can be used to carry out attacks such as malicious attacks, identity theft and phishing in vehicular networks. (Dibaei, Zheng, Jiang, Abbas, Liu, Zhang, Xiang Yu, 2020).

**3. Hacking into manufacturer-to-vehicle communications**

Hackers can break into the vehicles and using Remote Code Execution (RCE), a vehicle can be accessed from a remote server by executing arbitrary commands by the attacker. Cloning and Denial of Service (DoS) attacks are also possible with the help of intruding into manufacturer-to-vehicle communications. (Bharati, Podder, Mondal, Md. Robiul, 2020)

**4. Hijacking vehicle controls and sensors**

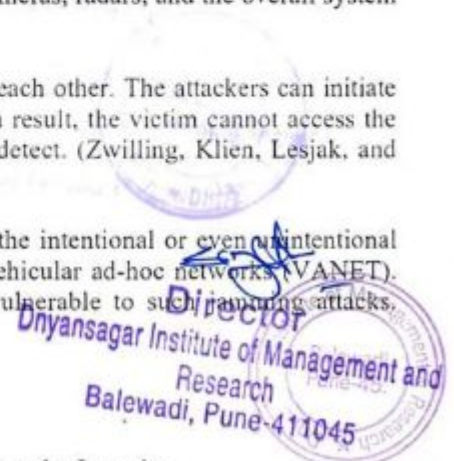
In this, the hackers can acquire unauthorised access to the car with the help of, Bluetooth channels, USB, monitoring systems, navigation consoles and wireless and cellular signals. The main concern is a huge data can be collected by the vehicle while in motion using GPS, sensors, cameras, radars, and the overall system components. (Naughton, 2018).

**5. Distributed Denial of Service**

In Vehicular Networks, there are many vehicles communicating with each other. The attackers can initiate attacks the victim from different locations and at different times. As a result, the victim cannot access the resources of the vehicular network. Such kinds of attack difficult to detect. (Zwilling, Klien, Lesjak, and Wiechetek, Sklodowska, 2022)

**6. Jamming**

In context with the wireless communications and wireless networks, the intentional or even unintentional Wireless Radio Frequency (RF) jamming causes serious threats in Vehicular ad-hoc networks (VANET). Modern vehicular networks having safety-critical applications are vulnerable to such jamming attacks. (Kim, Chung, 2021)





**7. Impersonation**

A false information can be injected in order to mislead the target vehicles or impersonation attack can be implemented by tampering the on-board unit. Attackers may collect the confidential information about the vehicle, track the vehicle's location through compromised navigation systems and may record the messages and communication between the target vehicle and the other connected vehicles. By divulging the authentication details of a vehicle, the authentication information can be used to access classified information or even as verification or validation with other parties. Attackers could also impersonate other vehicles to gain an advantage. (Dibaei, Zheng, Jiang, Abbas, Liu, Zhang, Xiang Yu, 2020).

**8. Black hole**

This attack severely affects the availability attribute of CIA triad (Confidentiality, Integrity, and Availability Triad) in which data packets as well as the control packets are dropped by the malicious vehicle. This may prevent communication between vehicles entirely and can significantly reduce the accessibility of Vehicular Ad Hoc Networks (VANETs). We propose a solution to help secure these networks against this vulnerability by detecting the attack and removing the malicious node from the network. Dropping of data packets has a stern impact on a security, interoperability and performance of the vehicular networks which may lead to accidents, traffic jams and fatalities. (Tobin, Thorpe, Murphy, 2017)

**9. Masquerading**

It is nothing but; by using other vehicle's identity, the attacker pretends to be another vehicle to carry out the frauds and malicious activities. For example, attacker's car may masquerade as a Police vehicle to trick with other vehicle to stop the vehicle or slow down their speed. (Upadhyaya, Shah, 2018)

**10. Global Positioning System Spoofing**

In the self-driving vehicles, the navigation through the Global Positioning System (GPS) must be secure. In case, when the security mechanisms, cryptographic controls mechanisms and authentication techniques are not appropriately developed and implemented, the satellite signals can be easily replicated and GPS spoofing attacks can be launched by the attackers. With the help of such attacks, the spoofers can manipulate the navigation data and cheat or misguide the vehicle. (Krayani, Barabino, Marcenaro, Regazzoni, 2023).

**11. Threats in Protocol Layer of VANETs**

The network and the transport layer in case of data transmission and communication may suffer from inappropriate routing and intentional delays and man-in-the-middle attacks in VANETs. The vehicle's location, network topology, vehicle's velocity, and distance between two or more connected vehicles may affect the QoS (Quality of Service). Stealing of bandwidth allocated for the communication between the autonomous vehicles may lead to delay in delivering the messages as well as congestion and collision resulting in environmental impact. The cyber attacks in the protocol layers of VANETS may cause problems related to mobility, security, authentication, network management and scalability, etc. (Kugali, Kadadevar, 2020).

The ever-dynamic technological advancements globally are fast paced and so are the new challenges that threaten the precious knowledge becoming more susceptible to cyber attacks. Thus, such vulnerable data and network communications would need stringent mechanism to address and resolve not only the anomalies but as well defend the cyber-attacks. Traditional model may form a basis of any solution that is being proposed. Newer and better routes need to be evaluated and verified complimenting the legacy systems; to address the invading threats to knowledge in the cyber space.

**Gaps Analysis and problem description**

Till date, there have been many decision models identified, proposed, and implemented in various sectors applying various business logic. Thereby, facilitating decision making process through some workflow or pattern or model. In context of cyber security implementation as well, such decision-making models has been already proposed (Aitor, 2019)

For the first time in a century, the nature of how we use motor vehicles is on the verge of a

fundamental technological change. In the coming decade, an increasing number of travelers will go from; directly manipulating vehicle control inputs for accelerating, braking, and steering to simply entering a destination and sitting back for the ride. These people using connected and automated vehicles beforehand, must have assurance about their vehicles being adequately protected from malicious actors, trying to do physical or financial harm via cyber-attacks. (Abuelsamid, 2016).

One of the primary goals in adopting new technologies such as connected vehicles and autonomy is; to drive the fatality rate toward zero. However, that can only happen if those technologies work as intended and malicious



actors are prevented from tampering with the systems. Unfortunately, it is impossible to guarantee that any complex code base is free of logical errors, and according to researcher's observations; there is a significant probability that some number of those errors will lead to security vulnerabilities. With hundreds of millions of connected and automated vehicles expected to be on the road in the coming decades, the likelihood of attacks from hackers, stalkers, vandals, intruders, thieves, and those with political motivations; that may exploit those security vulnerabilities, for mass attacks increase exponentially.

The cyber security challenges in the secure communication modes in autonomous vehicles require greater level of exploration in terms of powerful decision models supporting technology adoption. In a sector such as an automobile and a subdomain of autonomous vehicles, the functionality is focused but cyber security takes a backseat. So, there is a need to focus on adoption of cyber security features which specifically in automobile sector is not done extensively. (Gekker , Hind, 2019)

Finally, data treatment must also be regulated. Security and privacy are the main goals, while ensuring the data sharing required by a cooperative driving environment. (Martinez-Diaz, Soriguera, 2018).

Based on literature review, gap analysis is being done, thereby arriving to the problem statement based on which the title of the research study has been evolved and justified. Furthermore, approaches towards designing and implementing algorithms for selecting the appropriate strategic decision model used in automobile sector are also being explored.

In a swiftly changing world, security of the vehicular network from the potential cyber attacks and the entire ecosystem of mobility is quite challenging as the stakes are very high and so is the complexity. The consumers are cautiously approaching towards the prospect of self-driving vehicles though the automakers and information technology companies are pushing themselves to keep themselves ahead of the hackers and other adversaries. In Indian context as well as in general; the investment in self-driving vehicles will be lucrative only when such vehicles will function securely. The thoughtfully developed standards can be enforced, encryption can be implemented to protect the integrity and protocols for secure development of critical vehicle systems and related networks can be implemented with caution.

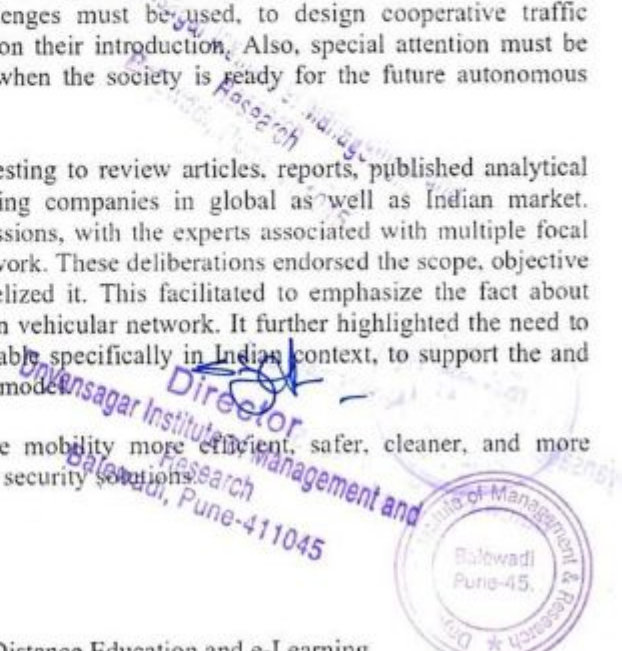
### Conclusion

The auto industry is among the most competitive business sectors in the world, with very little barrier to prevent customers from switching brands. Customers in the highest volume segments of the industry are also very price sensitive, and costs for manufacturers are rising continuously; as they struggle to meet ever stricter regulatory requirements while developing new technologies. It is important to focus with an exploratory approach to know the impact on both current and future products. Protecting vehicular infrastructures and human beings will require holistic approaches to design, implementation, and response when the unexpected incidences take place. The researchers attempt to check on with the awareness of the consumers with respect to autonomous vehicles, so that later, the empirical research work is proposed to be carried out.

As per the literature review carried out by researchers, fully self-driving vehicles is certainly not just a trend but, a promising aggressive automobile market in Indian context. It has been well received in the global market since a decade, consumer market in India is still under latent stage, albeit with prospective demand. Meanwhile, the time needed to overcome the technological challenges must be used, to design cooperative traffic management strategies which will guarantee success upon their introduction. Also, special attention must be paid to legal and ethical issues, which will determine when the society is ready for the future autonomous driving environment.

The research work being multidisciplinary, it was interesting to review articles, reports, published analytical reports, research papers, official websites of car making companies in global as well as Indian market. Moreover, there were thought provoking informal discussions, with the experts associated with multiple focal points coming under the purview of the area of research work. These deliberations endorsed the scope, objective and the purpose of the research undertaken and channeled it. This facilitated to emphasize the fact about criticality of cyber security implementation and threats in vehicular network. It further highlighted the need to explore various strategic decision models; that are available specifically in Indian context, to support the and come up with the proposed appropriate strategic decision model.

Autonomous Vehicles could contribute to make future mobility more efficient, safer, cleaner, and more inclusive with, the shield of optimal and innovative cyber security solutions.





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## APPLICATION OF EKM IN THE KEY BUSINESS PROCESSES: A SURVEY STUDY IN SELECTED IT COMPANIES IN PUNE REGION

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### ABSTRACT

Enterprises run multiple business processes that use and manage knowledge in various forms and context. The knowledge referred and generated; maybe projected or it may simply reside in the tacit form. Managing such knowledge can be relatively within one's capabilities however the real challenge seen in extracting it from the source where it resides. Typical business majorly is driven by strategic and tactical decisions; for which churning of appropriate knowledge base becomes inevitable. The true knowledge is boundless; that demands validating and mapping as per the need of the business processes. To spot the success of Business enterprise, knowledge base competence is one of the most significant aspects among others. Consuming organisational knowledge and maintaining its relevance to the past and present business processes is crucial as it may impact the accomplishment of sustainable competitive advantage.

Knowledge should be able to incorporate within the business processes effortlessly; however in context to the changing business scenarios it has become a challenging story. In this paper the researchers have considered the involvement of Knowledge Management (KM) in enterprises, wherein visible Human Resource Department exist handling the key business processes. The factors affecting the efforts of various KM initiatives have been identified and studied in IT companies in Pune region, considered for this study. Almost all the key business processes measured in the study; showed close connotation with Enterprise Knowledge Management (EKM); which directed to show its strong hold and influence on the key business processes.

**Keywords:** Enterprise Knowledge Management, Key Business Processes, Organizational knowledge

### Introduction

Technological advancements with massive data churning across the economy, managing knowledge is significantly vital. With innovative models coming up to manage the key business process of an enterprise, knowledge base competence to support the systematic execution of Enterprise knowledge management becomes indispensable. Knowledge Management is the management of organisational knowledge (Ermine, 2010). As a matter of fact, growing attention observed in organizational knowledge and KM spins ahead from transition into the knowledge economy, where this dynamic knowledge is observed as the principle source of value creation and sustainable competitive advantage. Enterprise Knowledge Management (EKM) involves many facets of the information systems domain including technical (business processes, flow of information, etc.), organizational and social (policies, structures and work roles, etc.) and teleological (purposes and reasons) considerations. (Petricles and Vagelio, 1999).

In this research paper certain aspects involved during the application of EKM in a typical IT organisation has been considered, where HRD is visibly one separate department. The impact of Enterprise KM on key business process areas is the focal point of the paper; wherein the survey has been carried out in some of the selected IT companies in and around Pune City.

### Literature Review and Problem Description

KM nature and life cycle has several forms of Knowledge and its representations in different contexts and various tools supporting KM practices and various processes. (Guehi, 2018)

(Edwards, 2016) KM times and their context in the changing business scenarios are prevalent since past 3 decades. KM is now no more a trend or a buzzword; actually it is one of those established terminologies that have endured changing times and this fact is learnt with the help of KM Case studies till date.





(Chen, 2007) KM echoes from knowledge creation or codification, to knowledge diffusion and exploitation. Knowledge has power to create that subtle difference to the worlds' competitive advantage as its journey since industrial economy until the present knowledge economy. The impetus to this transition today is that, knowledge has attained the worthiness and position at both: individual level and organisational level focus; in order to achieve the desired ambitions and goals respectively. Some earlier literatures as well attempted to focus primarily on the knowledge creation or codification processes in organizations.

(Salleh and Goh, 2002) Knowledge management as a process of leveraging knowledge, as a means of achieving innovation in process and products/services, effective decision-making, and organizational adaptation to the market for creating business value and generating a competitive advantage to organizations. Enterprise Knowledge Management is about implementation of collective knowledge of the entire workforce, systems and its business processes to achieve organisational goals.



Figure No. 1: Knowledge Management (Source: KMS Lighthouse, May 2022)

On the KMS Lighthouse (2022) portal blog describes how the business process are completely based on the KM. Wherein internal processes are driven by knowledge of best practices followed by the employees, group knowledge in that organisation set-up and also driven by the environment in which it resides such as customer knowledge, market and competitor knowledge etc. Nevertheless, to maintain its usability, knowledge in any enterprise needs to be dynamic, evolving and should integrate throughout business processes. (Garfield, 2016) blog on the LinkedIn social media narrates several crucial perspectives in series of posts related to KM Implementations, wherein particularly in this post the steps for a successful implementation of KM Program are found and supports to the study undertaken. (Kebede, 2010) Knowledge management is the creation and subsequent management of an environment which encourages knowledge to be created, shared, learnt, enhanced, and organized for the benefit of the organization and its customers. (Davenport, Long and Beers, 1998) From more than 3 decades the term knowledge management is coined and used for reorganisation of knowledge in different context. In the published book (Davenport and Prusak, 2000) as well reiterate this examined about how their intellectual assets in several types of companies, can be effectively understood, analysed, measured, and managed, thereby turning corporate wisdom into market value. (Seymour, 2023) Managing the Key Business processes efficiently is vital as it has the potential to improvise the overall operations. It directly results in condensing costs; enhanced control over the workflow can be accomplished, operational deficiencies pinpointed. This certainly would provide superior insights for improved enriched business decisions to remain competitive and agile. (Edwards, 2005) There is resilient association of KM and business process in a precise manner. There are internal processes driven by the best practices initiated or leveraged by the employees. There are products and services that are designed developed and continuously upgraded/adapted improved based on the knowledge flickering within and outside of the enterprise. Both of these add value to the customer experiences. In an enterprise nearly all the elements are involved in it some in visible way and some in invisible way scattered across the environment. There is a need to keep the knowledge aligned and integrated easily throughout the business processes so that it does not become obsolete. The controlling of the evolving knowledge is crucial and essential; for keeping the key business process of an organisation in-equilibrium.

EKM Framework, IT Industry and HRD: A basic framework is required to be defined essentially at the beginning of any design of a Model to be implemented in a business setting. The values, the culture, communication habits & management styles of a particular organisation either aid or hamper KM initiatives.



These knowledge structures or framework are to be customized for a particular business entity. They emphasize the necessity for the enterprise to embed their organizational knowledge within the working purview of the HR precisely. Organizational knowledge in any IT Company must be a complex, critical aspect to achieve sustainable competitive advantage. Here IT Industry as a term is used interchangeably as multiple terminologies like IT Service Industry, Software Industry, Software and services Industry, IT and ITES Industry, etc. have been used by the respondents of these companies when interacted. In view of the prediction made last year (2022), that global IT investment would reach US\$ 4.5 trillion, up 5.1% from 2021. investments in human assets are seen enchanted in the backdrop of Covid Pandemic. Despite the potential effects of many variants like the Omicron and many more, lately it has emphasised that the economic recovery, coupled with high expectations for digital market success, continued to drive technological investments.(Gartner, 2022) Furthermore, Indian services export is estimated to reach us\$ 1 trillion by 2030 especially in the industries such as healthcare, transport, information technology, business process outsourcing, hotels, restaurants, tourism logistics, transports, and space. In such scenario immense knowledge churning expected, rising the need to manage it efficiently and effectively across all businesses. Three levels of knowledge transfer can be identified in this context, and every level increases the scope of the knowledge related characteristics of enterprises namely: individual and group level, organization level and global level. Whether it is a local or global software company, globalization has re-energized the vital environmental factors shaping the work of HRD professionals. Knowledge based systems and its association with HRD has taken the role of the HR Managers at a higher stand and given HR function a multidisciplinary facet. In this paper the researchers propose to study EKM as a disciplined approach for HR personnel to manage the intellectual assets of the IT enterprise and reinforce the business process.

**Key business processes correlation with EKM:** A business process is a set of logically related business activities that combine to deliver something of value which could be a product or a service or even information to the desired customer. Business processes can be seen individually, as distinct steps in a business cycle. There are several business processes in an enterprise that are associated with the functional view of that enterprise. Most large organizations are structured into divisions and departments that are dedicated to performing specific functions and staffed with personnel who are expert at those functions. Business processes cut across these organizational divisions. Where different activities in a process require different skillsets, the process is likely to involve a number of people and departments. A business process is made up of a hierarchy of activity levels. These levels are typically given labels such as; sub-process, activity and task. Strong management processes or workflows are basic and crucial to resilience within an enterprise. Diverse process design projects may target different areas of business activity, as per the focus and requirements of any organizational.

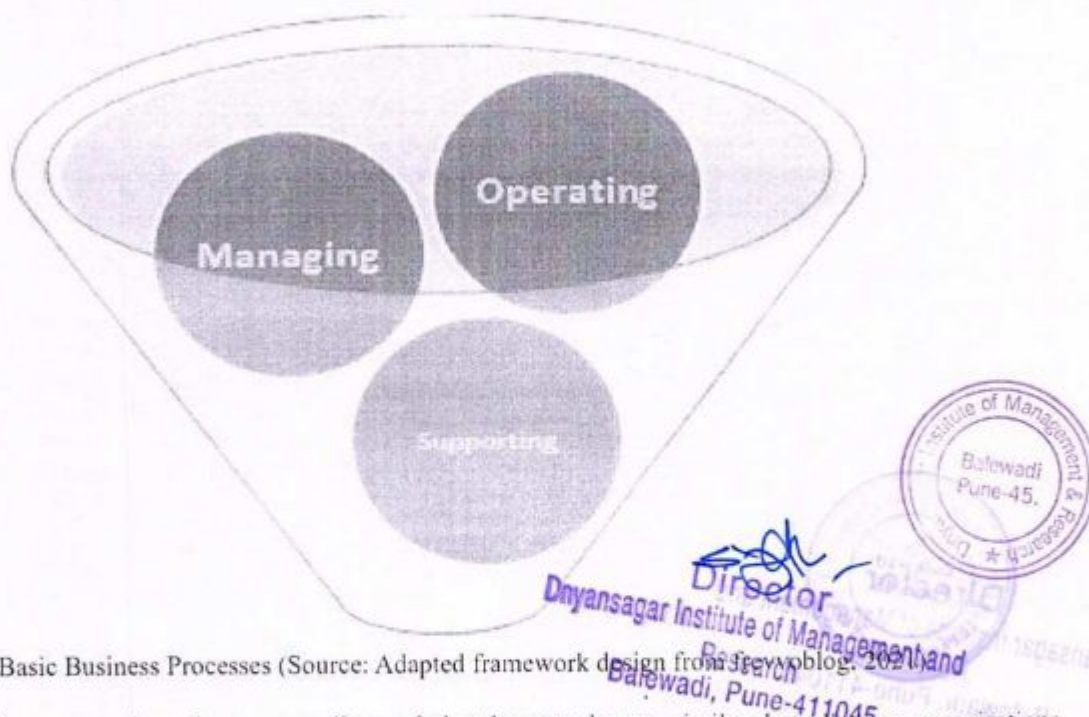


Figure No. 2: Basic Business Processes (Source: Adapted framework design from research blog, 2021)

Organizational structure throughout many diverse industries may be not similar, but all these organizations perform similar Business Processes. Nevertheless, there can be resemblance of some business processes of say HR for one industry similar to another. In fact, the HR Business Processes may even be critical success factor for another industry with which a comparison can be considered very important exercise to benchmark the business process. A common business process framework indeed has the potential to form a quality base or a



foundation of the famous Software Engineering Model proposed by SEI (Software Engineering Institute) to strengthen the EKM Model effectively.

EKM comprises managing the key business processes and functions; that may impact on the innovation process and different sources of knowledge. As a part of a particular business process management, every knowledge resource as an important stakeholder has to have appropriate access. They need to possess the know-how about those tasks associated with the business processes and the way in which they have to be carried out. Every organization have one or more KM Initiatives in the form of drives , forums and similar group of people working for getting connected and sharing information for a constructive cause which add value or contribute to the body of knowledge. This directly or indirectly affects to the business growth as well as reaching out all the mass on common topic or problem discussion or experience sharing or just retrospection. In IT companies there are multiple business processes and functions carried out to run the business under several work mechanisms being executed. While dealing with the day-to-day procedures the HR faces lot of business challenges as well as concerns while dealing with any new initiative like KM initiation. In every aspect stated above, there exists correlation of existence of a KM rich consistency within these process, mechanisms, challenges as well as measures devised to deal with them. There are certain influencing factors those need to be identified and managed, immaterial of whether the company is a small scale or a medium scale or a large scale organization. There are several important core and non-core business processes that make the business run. While implementing business processes especially when critical and multiple functions are involved it might raise some discrepancies with potential to hinder the normal workflow of any business. EKM in place could address the information requirement essentials for the smooth workflow.

#### Scope and Objective of the research study

The scope of the research undertaken has been limited to examine and understand the existing enterprise wide KM systems and the business processes in an IT organization. For this research paper purpose the scope is restricted to EKM Implementation, its impact on key business processes in background of HR involvement reviewed. The researchers have considered the IT companies in and around Pune region for the study as a geographical scope for the problem statement and its analysis.

#### Research Methodology

A stepwise approach has been followed for conducting this research study wherein, Survey Method is predominantly used for this research study. The extent of the research is to evaluate the application of EKM in HRD; that facilitate the business processes in organization; to study the influencing factors in the changing environment in business and technology in different companies including Multinational Companies (MNCs). For undertaking a comparative analysis of different categories of companies, the study is restricted to the selected companies in IT Sector, in and around Pune (Maharashtra State- India).

**Research Hypothesis:** "Understanding of Application of EKM is effectively reflected in the key business processes and KM initiatives in IT companies"

#### Data Collection and Data Analysis

The methods for collecting the data were primary and secondary sources. Multiple data collection tools were used namely; Structured Questionnaire, Planned Interview with the Mid-senior level employees especially HR personnel, discussion with the senior Managerial employee, employees especially from the HR Forum, KM Focus group, Talent Group, etc. A **pilot study** was conducted in 10 to 15 known IT companies in Pune before planning for the full scope detailed research study. It helped in improving the questionnaire and gave a better roadmap to carry out the data collection. Secondary Data collected by the researcher by visiting several Libraries. Supportive publications online and printed form; were referred throughout the study. Cronbach's Reliability Test is used to determine the internal consistency.

Reliability test result	
Cronbach's Alpha	N of Items
.734	19

Table 1: Cronbach's Reliability Statistics using SPSS

The alpha coefficient for the dataset of 19 items is .734, indicating that the items have fairly high internal consistency. Reliability coefficient of .70 or higher is considered as "acceptable".



**Sampling Design:** The sampling has been done in 2 stages for the convenience of the study undertaken and the type of the data that was considered. Stage 1: Multi-Stage Sampling Technique (Purposive Convenience Technique): Purposive Conventional Sampling Technique has been followed in the research survey. Stage 2: Stratified Disproportional Sampling Technique was applied based on the types of the companies. The researchers has chosen, more than 7 % of the sample; from the population of IT Companies in and around Pune.

Source Organization	No. of MNC Companies	No. of Indian Companies	Total Companies
MCCIA	98	932	1030
Fundoodata.com	108	1887	1995
NASSCOM	90	901	991

Table No: 2: Total IT companies in Pune taken for study

There were 100 odd companies reached out with Questionnaire; out of which pertinent responses were received from 56 companies, which have been considered for this research study. Moreover, 12 respondents were engaged from Top management in interview and/or discussions.

There were more than 15 key business processes mentioned in various articles as well as stated during the discussions during the pilot study undertaken. After normalizing the most appropriate, common and having similar interpretation around 13 Key business processes were recognized. These were ; E-commerce processes, Business Communications(written, verbal/published, unpublished), Strategic and business planning activities, Premises /Administrative (Head Office and branches), Research and development activities, Finance and Accounting, Human resources management , Production line and processes, Quality assurance and Quality control mechanisms, Information technology services, Maintenance and support services, Customer services, Marketing and public relations.

In the detailed research study the association of these 13 key business processes was thoroughly studied; which showed that these business processes have close association with the application of EKM. This was seen as reflected percentage of KMS system actively implemented in the IT organization scored over and above 90 % in both the type of IT companies: IndianIT&Indian MNCs and Foreign MNCs, in all the given aspects of achievements. Furthermore, other business processes namely HRM, Quality Control, Quality assurance and IT Services scored 100 % which is noteworthy observation. It indicated that EKM reveals its existence in most of the key business processes with a Highly Significant score. The business process that scored the least significant point was identified as Premises /Administrative (Head Office and branches) in both IndianIT&IndianMNCs and Foreign MNCs with 50 % and 61.71 % respectively. Majority of the responses reflected the need to start the KM in both IndianIT&IndianMNCs and the Foreign MNCs was to bring transparency in process and boost productivity; thereby manage information and enrich the systems in an innovative and qualitative way.

Other responses projected needs and considerations based on the maturity of the application EKM in the IT Company. Organizations where EKM is recent initiative were more concerned about the consistency in understanding the whole business cycle. Whereas, the organizations where EKM has been in a matured phase had profound points to ponder like creating technological diversified team with competency building and sharing, providing more client-centric solutions in cost effective manner, predicting the prospects to become pioneer in specific domain, better reach-out within employees, with the partners and likewise with the consumers too. This aided in aligning with the pace in today's competitive highly data driven business market.

### Results and Inference

**Research Hypothesis:** "Understanding of Application of EKM is effectively reflected in the key business processes and KM initiatives in IT companies". Tested and accepted.

To validate this hypothesis understanding attributes were defined with respect to:

- Key business processes and
- KM initiatives





**Findings**

Efficiency percentages of training that are being organized in order to Increase in creativity and innovation in both Indian IT & Indian IT MNCs (92.85 %) and Foreign MNCs (89.28 %).

Key Business Process ↓	Indian IT & Indian IT MNC		Foreign IT MNCs	
	No.	Percentage	No.	Percentage
a) E-commerce processes	23(5)	82.14	25 (3)	89.29
b) Communications (written, verbal/published, unpublished)]	26(3)	92.86	28 (1)	100.00
c) Strategic and business planning activities	27(2)	96.43	27(2)	96.43
d) Premises /Administrative (Head Office and branches)	14(8)	50.00	17(5)	60.71
e) Research and development activities	27(2)	96.43	27(2)	96.43
f) Finance and Accounting	18(7)	64.29	24(4)	85.71
g) Human resources management	28 (1)	100.00	27(2)	96.43
h) Production line and processes	20(6)	71.43	24(4)	85.71
i) Quality assurance and Quality control mechanisms	28(1)	100.00	27(2)	96.43
j) Information technology services	28(1)	100.00	28 (1)	100.00
k) Maintenance and support services	23(5)	82.14	27 (2)	96.43
l) Customer services	25(4)	89.29	27(2)	96.43
m) Marketing and public relations	23(5)	82.14	27(2)	96.43

Table No.3: Ranking of Association of Key Business Process that EKM should focus for successful Implementation (Figures in brackets indicates ranking the Key Business process parameters)

To decide the usefulness of employee engagements to consider the desired parameters, and available sample; "One sample T - Test" used to compare Means at 6 level of degree of freedom.

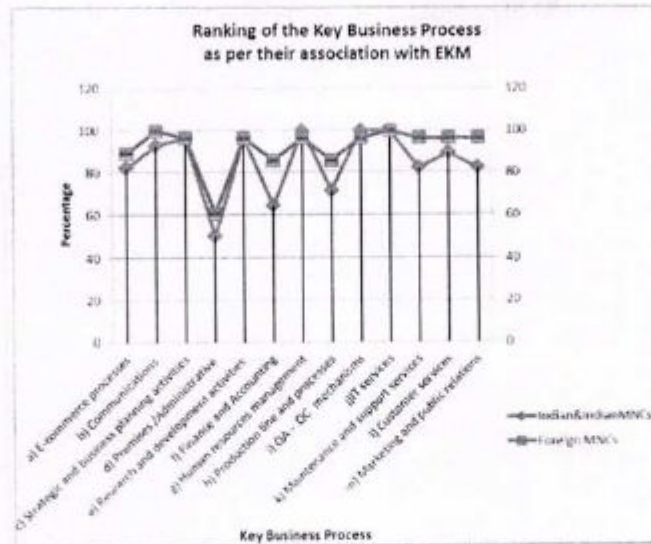
In order of this the observed 95 % confidence interval of the lower and upper difference (232 and 250) at 2-tailed significance. Therefore considered ranking for observed parameters.

**Inference: Based on the data and statistical tests the given Hypothesis;**

"Application of Enterprise Knowledge Management (EKM) is significantly understood in the key business processes and KM Initiatives in IT companies" is accepted. The secondary data also supported this hypothesis.


  
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Graph No: 1: Ranking of Association of Key Business Process that EKM should focus for successful Implementation

There are ample of enterprise-wise KM activities, drives and initiatives visible or invisible, consciously or unconsciously being implemented wherein, few are success and few fail. These knowledge base environments influence the business systems and functions significantly in both; Indian IT & Indian ITMNCs and Foreign MNCs, in all the given aspects of the accomplishments. The study further indicated that almost all the key business process in both the type of IT companies showed close association of EKM. The analysis study revealed that; EKM has an active role in major business process of an organization. The existence of EKM initiatives has favourable impact on these business processes.

In majority of organization where HR is separate entity, the HR personnel are constructively involved in EKM Initiation and Implementation. Moreover, technology has positive and strong hold on EKM Application; as it is the support system for systematic Implementation of EKM.

There exist positive trends in knowledge based systems, wherein HRD plays a vital role. There is a need of upgrading the skill set of HR Managers to utilize the KMS; as they remain under-utilized. The fundamental components of HRD processes and its association with EKM facilitate the organization to addresses such prime concerns like; to comprehend skilled labour requirement innovatively or retain resource or its knowledge perspectives in a live repository form. This crucial fact was supported in the Focus group interaction conducted with few HR Heads from MNCs in Pune. KM initiatives across the IT organizations are undergoing changes constantly. The top management of the organizations can reflect seriously over these KM initiatives considering it as effective methodology in the long run. These drives enrich and strongly support business process which are profoundly dependent on information and allied services in the knowledge intensive economy. EKM is gradually getting acceptance as it has advanced to have the capability to become an integral part of a business function in the organisations. Some of the HR Heads spoke on gearing up for newer challenges and up-skilling to the artificial Intelligence based knowledge systems for HR implementation which would be the building blocks for further study. Some HR Leaders gave suggestive input for coming up with a model based on Agile Methodology. A common business process framework can form a quality base or a foundation as depicted in the famous Software Engineering Model proposed by SEI (Software Engineering Institute). Such a framework would strengthen the EKM Model effectively is one of the significant outcome observed during the deliberations with the key personnel in the IT companies.

**Concluding Remarks**

The survey research concludes that for application of successful EKM, systematised efforts are essential followed by identification of the prioritised areas. It was observed that all the considered Key Business Processes showed close connotation with EKM; specifically Human resource, Quality assurance & Quality control mechanisms and IT Services in particular had significantly high score indicating strong association. For effective implementation of EKM, the HR department need to gear up in action. They need to invest in skilling as per the need of the technological advancements and explore innovative approach to facilitate the execution qualitatively. Although there are massive enterprise-wise KM activities being implemented in enterprises wherein, few are successful and few fail. These knowledge base environments influence the business systems.





processes and functions significantly creating turbulence in the business eco-system. EKM is certainly not tied up with the Business processes; rather it is undergoing dynamic changes with the changing transformations in Business scenarios across the globe. With newer and better Enterprise Knowledge Management initiatives being refurbished and weaved within advance environments; change is inevitable and gearing up with this new outlook needs meticulous efforts.

### Scope for Further Research

Design Thinking, SEI- CMM and Agile Methodology can be explored for further deliberations that may add value to the research excursion ahead, in this area; precisely in the IT sector. As a final line of thought, the researchers propose that; Enterprise KM has an active multidimensional context: with technology and Human Resource being the important support system to implement across all the key business processes.

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## Impact of Work Life Balance (WLB) on Job Switching Behaviour- An Empirical Study

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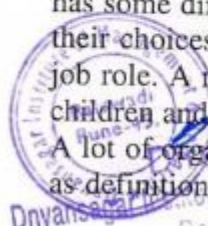
Till date, researchers done WLB have mainly focussed on work and the family domain. However, the present-day workforce is heterogenous in nature and the workers might even value the other domains of non-working apart from family. These researchers mainly aim at investigating the significance of the other domains of non-working in work life balance with a special focus on the health of workers. Besides, the meaning of the effect of balance between serious and fun activities and work wellbeing balance on representative fulfilment was evaluated. Likewise, these examinations investigate the impact of balance between serious and fun activities and work wellbeing balance on change in the degree of representative fulfilment according to the qualities of the laborers including parental status, age, work capacity and sex. The consequences of studies show that the specialists believe wellbeing to be a significant factor in the space of balance between fun and serious activities. Work wellbeing balance clarifies a greater amount of change in representative fulfilment when contrasted with balance between fun and serious activities, A sample of 311 respondents was surveyed to find the factors related to work life balance and their impact on job switching behaviour. After applying factor analysis, a statistical tool and analysing the data the study concludes that Work health balance, Job satisfaction, Work environment, Relation with management and co-workers, and Work and personal life balance are the different factors related to work life balance that shows significant impact on job switching behaviour.

**Keywords:** work life balance, work health balance, employee satisfaction, job satisfaction

### Introduction

For handling the balance between work and life, researchers mainly stress that the working population learns to create network of support at their work, home and in their community or else they are not able to stabilise themselves in their job. A conflict between family and work has some dire consequences for the female workers which may include severe constraints on their choices of career, restricted opportunities for advancement in career and success in the job role. A need to select between the 2 prominent opposites- satisfying and active career or children and marriage (Tan, 2018).

A lot of organisations face a lot of challenges in measuring employee satisfaction accurately as definition of job satisfaction may differ between different people within the organisation.

  
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However, most of the organisations do realise that employee satisfaction has an impact on their performance and they create a benchmark to measure employee satisfaction. The managers may use proven test techniques like JDI or Job Description Index. These techniques help the management in defining employee satisfaction objectively. The workers who have issues in balancing their job roles and the family roles, also set some poor examples in the work setup of the organisation and they also often upset friendly work environment. Thus, both employee satisfaction and a balance between work and life are related with on another and they also have an effect on performance of the employees. With employee satisfaction, the workers are always looking for a job change.

Also, very less is known about the effect of cultures on relation between individual outcomes and work life balance. According to studies cross national work and life researches have identified just 2 cross cultural researches which focus on the work life balance. The single cultural dimension which has been assessed in all these researches is gender egalitarianism. It is clear cut shortcoming of the researches that have been done for broadening the scope and the ambition of researches done of work and life balance.

These studies establish that work life balance is a firm construct which throws light on some major individual results, and also encourage future researches on work life balance as the way for better understanding the complex interface of work and life. They also encourage the practitioners for assessing the work life balance of their employees as a part of HR efforts. Also, they burgeon the body of the cross-cultural researches on interface of work and life.

These studies also prove that the concepts of work and life have originated from the Western cultures (Chung, 2019).

### Literature Review

Particularly in the midst of pandemic, the vulnerability in physical business can be kept away from by zeroing in on the speculation of online media showcasing business methodologies. Second, corrective brands ought to constantly contribute their endeavours to further develop brand value since brand value fundamentally impacts buy aim. Brand value is viewed as an upper hand to the firm. Consequently, advertisers ought to dissect promoting action for a brand and acquaint the general impact it has on brand information (Jnaneswar, 2016).

The recognizable proof of the balance between serious and fun activities as a marker of the balance between serious and fun activities was somewhat compelling and valuable in late many years, when the best change in work environment socioeconomics was the increment in the interest of ladies, and the administration of family and work jobs for working ladies and double worker couples, particularly those with kids, turned into a focal issue inside associations (Chung and Lippe, 2020). At present, work environment socioeconomics are more heterogeneous. Notwithstanding the gigantic presence of lady in the work market, we are likewise seeing an expansion in the pace of dynamic old laborers, laborers with a LSHPD, single specialists, and childless couples. Obviously, a selective spotlight on family has become basically reductive while considering the balance between serious and fun activities (Haar, Sune, Russo, 2019).

A connection can't make a reasonable social event of working experts without mind blowing Human Resources. The urgent parts of the Human Resources Management (HRM) bundle unite enlisting individuals, setting them up, execution evaluations, arousing specialists comparably as working environment correspondence, work environment thriving, and basically more HRM can be considered as one of the most basic working spaces of the bosses and source to accomplish reasonable strategic position to as connection (Gerstel & Clawson, 2018). Thus, every affiliation rushes to utilize its HR in a useful and convincing manner to

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achieve anticipated destinations and objectives. Work-family balance described as satisfaction and incredible working at work and at home, with essentially work battle.

Essentially, the harmony among genuine and fun exercises game-plans are a huge part in social event this test dismissing sexual direction. Ex: Women are to take care about their families and children and need to work and nowadays most women work and deal their commitments with men, etc (Sirgy, Lee, 2018).

Then again, if representatives invest an excess of energy in their own life and put in less energy into their work, they will feel that their life is absence of something. They will come up short on the satisfaction and fulfilment from work and profession accomplishment. This is the thing that it implies by being out of equilibrium (Chung, 2019).

What's more, it is significant of remaining in balance among individual and work life. Essentially, on the off chance that one has figured out how to allot the necessary time for each part of life properly and not to mirror the issue in one piece of life to another imply that has had the option to accomplish work family adjust. Life all in all is made out of a significant number of the perspectives alongside work. Then, at that point, who have accomplished the equilibrium among these angles makes certain to accomplish the existence offset which gets rid of any lop-sidedness (Jnaneswar, 2016).

All most every one of the associations are searching for better exhibitions and usefulness where individuals are searching for happiness, pay, advancement and occupation fulfilment while keeping up with their own lives. To have better execution and useful worker, the association ought to apply balance between fun and serious activities arrangements to accomplish great outcomes from their representatives (Subramaniam, Overton & Maniam, 2015).

With regards to ABC as well, the administration should comprehend of powerful balance between serious and fun activities strategy to fulfil all workers, where should prompt better job fulfilment and execution (Suyasa, 2017).

Occupation fulfilment is the most every now and again concentrated on factor in hierarchical examination since businesses need to realize how to stay away from work turnover and prize their best specialists. Investigates have characterized work fulfilment as any mix of mental, physiological and ecological conditions that causes an individual honest to say I am happy with my work (Alias et al., 2018).

As per concentrates on work fulfilment is affected by numerous outside factors. However, one more review on work fulfilment, it basically centres around the job of the representative in the work place. In this manner, it characterizes work fulfilment as emotional direction with respect to individual towards work job which they are involving. By and large, Job fulfilment can be clarified by fulfilment with parts of a task that the specialist likes or abhorrence's (Patricia et al., 2018).

At the point when general fulfilment is high, little consideration is paid to fulfilment with work aspects. Be that as it may, when work fulfilment overall is lower, analysing the features might clarify the low spirit by recognizing the loathed work parts. There are numerous features, and numerous methods of conceptualizing and estimating them.

With a couple of special cases, cross-public exploration has generally disregarded balance between fun and serious activities. Nonetheless, there is general agreement among researchers that balance between fun and serious activities is exceptionally esteemed by practically all workers and it has significant ramifications on individuals' prosperity and work usefulness everywhere (Braun, Peus, 2018).

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### Objective of the study

1. To find the factors affecting work life balance on job switching behaviour.
2. To find the impact of different factors of WLB on job switching behavior

### Hypothesis of the study

*Ha There is no significant impact of different factors of WLB on job switching behavior.*

*H0 There is a significant impact of different factors of WLB on job switching behavior.*

### Research methodology

In this study, 311 respondents were surveyed through a questionnaire. Employees of different sectors were considered to know different factors that affecting work life balance on job switching behaviour. The nature of the study is empirical. EFA was applied through IBM SPSS Statistics 20 software to reach to end results.

### Findings of the study

Table 1 is demonstrating the demographic profile of the respondents in which it is found that total 311 people were surveyed to conduct the study in which 58.5% were male and 41.5% were female. Among them 30.5% belongs to age group 26-36 yrs, 37.6% were from the age group 36-46 yrs are 31.9% were above 46 years of age. 25.4% of the total respondents were academicians, 29.9% were working in the corporate sector, 27.3% were bank employees, and rest 17.4% were working in some other sectors. 38.9% of the total respondent was married and rest 61.1% were showing unmarried in their marital status.

**Table I** Demographic profile

Variable	No. of respondents	Percentage
<b>Gender</b>		
Male	182	58.5
Female	129	41.5
<b>Total</b>	<b>311</b>	<b>100</b>
<b>Age</b>		
26-36 years	95	30.5
36-46 years	117	37.6
Above 46 years	99	31.9
<b>Total</b>	<b>311</b>	<b>100</b>
<b>Occupation</b>		
Academicians	79	25.4
Corporate sector	93	29.9
Banks	85	27.3
Others	54	17.4
<b>Total</b>	<b>311</b>	<b>100</b>
<b>Marital Status</b>		
Single	121	38.9
Married	190	61.1
<b>Total</b>	<b>311</b>	<b>100</b>

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## Factor Analysis

Table II "KMO and Bartlett's Test"

"Kaiser-Meyer-Olkin Measure of Sampling Adequacy"		.875
"Bartlett's Test of Sphericity"	"Approx. Chi-Square"	3987.191
	"df"	120
	"Sig."	.000

KMO is 0.875 as per Table 2, hence it satisfies the requirements.

Table III "Total Variance Explained"

Component	"Initial Eigenvalues"			"Rotation Sums of Squared Loadings"		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.789	42.433	42.433	3.553	<b>22.207</b>	22.207
2	2.172	13.575	56.009	2.716	<b>16.976</b>	39.183
3	1.631	10.196	66.204	2.535	<b>15.842</b>	55.025
4	1.340	8.373	74.577	2.303	<b>14.394</b>	69.419
5	1.098	6.863	81.441	1.923	<b>12.022</b>	<b>81.441</b>
6	.638	3.988	85.428			
7	.535	3.345	88.774			
8	.451	2.819	91.592			
9	.283	1.768	93.360			
10	.218	1.365	94.724			
11	.196	1.227	95.951			
12	.180	1.125	97.076			
13	.153	.954	98.030			
14	.126	.787	98.817			
15	.109	.683	99.500			
16	.080	.500	100.000			

As per Table 3 there are five constructs. The 1<sup>st</sup> Factor explains 22.207% of the variance 2<sup>nd</sup> Factor explains 16.976%, 3<sup>rd</sup> Factor explains 15.842%, 4<sup>th</sup> factor explains 14.394% and the last 5<sup>th</sup> factor explain 12.022%.



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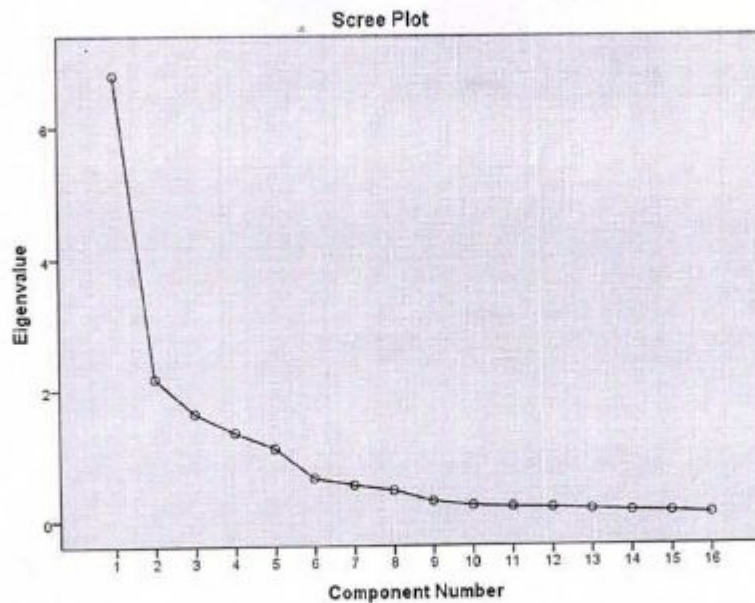


Figure 1 Scree plot

Figure 1 shows the movement of the Eigenvalues 1.

Table IV: Factors, Factor Loading, and Reliability

SL. No.	Factor Names	Factor Loadings	Factor Reliability
<b>1.</b>	<b>Work health balance</b>		<b>.956</b>
1.	I am not able to balance the workload of my current organization	.880	
2.	I am not able to manage my work and family time	.879	
3.	I am facing health issues due to imbalance work health	.858	
4.	I am not able to put in all my efforts to accomplish my work	.842	
<b>2.</b>	<b>Job satisfaction</b>		<b>.934</b>
1.	I am not satisfied with my current job	.911	
2.	I am not able to satisfy my organization with my work	.910	
3.	My organization is not satisfied with the efforts I put in my work	.898	
<b>3.</b>	<b>Work environment</b>		<b>.931</b>
1.	I am not satisfied with the environment of my work place	.852	
2.	My work place lacks in healthy work environment	.843	
3.	I am not getting a healthy work environment to show my potential	.800	
<b>4.</b>	<b>Relation with management and co-workers</b>		<b>.836</b>
1.	My relation with management is not healthy	.828	
2.	I am not able to connect with my co-workers	.827	
3.	I do not share a positive relation with my seniors	.826	
<b>5.</b>	<b>Work and personal life balance</b>		
1.	I am not able to balance between my work and		

  
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	family		
2.	My work life dominates on my family	.779	
3.	Stress in my family affects my work life	.758	
DV	Overall impact of work life balance on job switching behavior		

There are 5 factors out of 16 statements. The 1<sup>st</sup> factor "**Work health balance**" is constituted by 4 variables namely I am not able to balance the work load of my current organization, I am not able to manage my work and family time, I am facing health issues due to imbalance work health, and I am not able to put in all my efforts to accomplish my work. 2<sup>nd</sup> Factor is constituted by 3 variables namely I am not satisfied with my current job, I am not able to satisfy my organization with my work, My organization is not satisfied with the efforts I put in my work. The factor has been named as "**Job satisfaction.**" 3<sup>rd</sup> Factor is constituted by 3 variables namely I am not satisfied with the environment of my work place, My work place lacks in healthy work environment, and I am not getting a healthy work environment to show my potential. The factor has been named as "**Work environment.**" 4<sup>th</sup> Factor is constituted by 3 my relationship with management is not healthy, I am not able to connect with my co-workers, and I do not share a positive relation with my seniors. The factor has been named as "**Relation with management and co-workers**" and the 5<sup>th</sup> Factor is constituted of 3 variables namely I am not able to balance between my work and family, My work life dominates on my family, and Stress in my family affects my work life. The factor has been named as "**Work and personal life balance.**"

### Reliability

Reliability of all 16 statements was found as 0.981, which fulfills the criteria of "Cronbach's" Alpha (>0.7).

### Conclusion

Health concern has emerged to be a central topic in organisational studies. It does not pertain to just the smaller groups of people who are employed and have sever health issues. The change in work force and in the role of patient in health systems have compelled to consider management of issues regarding health as exclusively non-working task. Studies also show that the workers know about the significance of health domain in order to achieve good balance between work and life. The outcomes demonstrate wellbeing to the key area in balance between serious and fun activities elements which is similarly significant as space of family. Analysts and specialists accordingly need to consider wellbeing area alongside family space while surveying balance among work and life. By showing contrasts basically of work and family equilibrium and harmony among work and wellbeing on representative fulfilment for the various fragments of laborers, studies exhibit the meaning of individual contrasts in course of adjusting work and life.

The study concludes that Work health balance, Job satisfaction, Work environment, Relation with management and co-workers, and Work and personal life balance are the different factors related to work life balance that effect the job switching behaviour. It is also found that there is a significant impact of these factors on job switching behaviour.

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## **Transforming Human Resource Management with HR Analytics: A Quantitative Study of Benefits and Challenges**

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### **Abstract**

The advent of digitalization and technology has spurred the need for making the systems robust and automated for lesser human intervention. The human resource departments are responsible for managing quite complex tasks such as talent acquisition, performance management, compensation, benefits, and other essential employee-related functions. It is not always easy to manage a huge record of employees manually. Earlier Human resource function was more of a transactional and administrative job. However, with changing roles and job profiles the way of doing things has also changed. As businesses have acknowledged the role of Human Resource Management in leveraging the resources available to help organizations achieve a competitive advantage. HR analytics has become essential for businesses to carry out complex tasks and predict the trend for making future strategies. In the modern era, HR analytics is the buzzword for HR professionals. It helps to figure out the gaps in the performance of individuals and teams and suggest methods to fill them with the usage of Artificial Intelligence or other related technologies. In this study, the focus has been directed toward understanding the role of HR Analytics in transforming Human Resource Functions. Sample of 197 respondents from HR team of different organizations were surveyed to know the benefits, challenges and impact of Transforming Human Resource Management with HR Analytics. It is found that there is a significant impact of Transforming Human Resource Management with HR Analytics on an organization.

**Key Words:** HRM, HR Analytics, People Analytics, Advantages, Challenges, Solutions, Human Resource Functions.

### **Introduction**

With several signs of progress in technology, innovation as well as cloud computing, there are presently various information sources accessible to direct navigation and drive the accomplishment of success of different organizations. Gathering the right sort of information generally lies on the bucket list of HR departments to have solid scientific abilities. High-performing HR groups realize that they can use information as a method to create options by distinguishing certain related metrics or information that conveys a specific idea for creating strategies (Schuler, 2015). These strategies are then used for organizational growth and progress. HR should guarantee that the specific metrics and measures are utilized by the organizations to accomplish their vital goals. HR Analytics also known as people analytics is the method involved in gathering and deciphering information related to the employees for further developing the performance of individuals and teams within the firm. The cycle can likewise be alluded to as talent or workforce analytics (Vu, 2017). This technique entails analysis of





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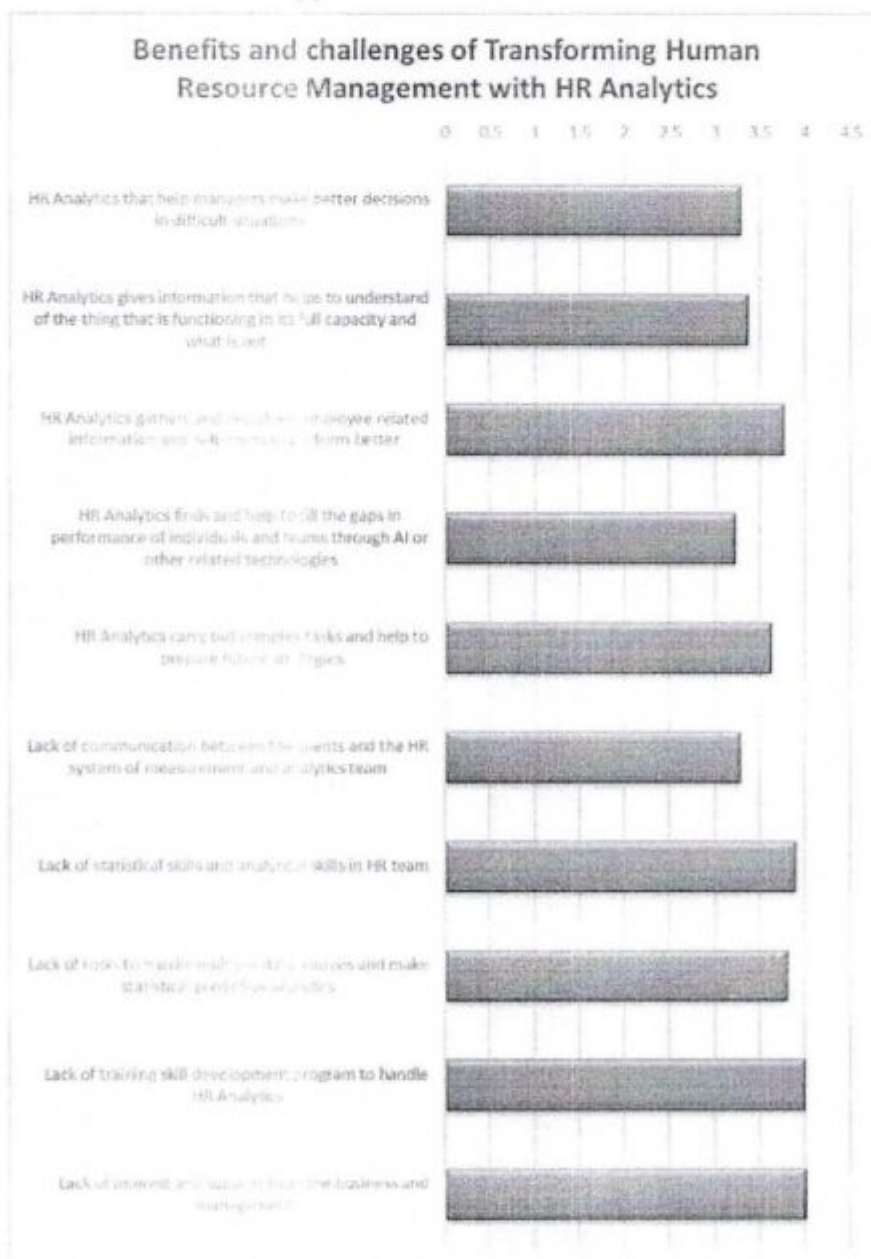
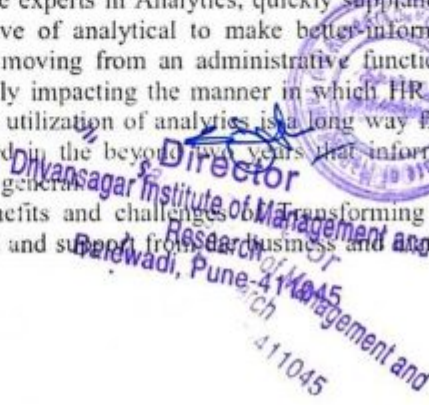


Figure 2 Benefits and challenges of Transforming Human Resource Management with HR Analytics

**Conclusion**

It has been made clear with the facts presented in the study that HR Analytics can give a comprehension of business capacities and assist the HR experts with creating plans that optimize ability speculations while actually observing and making improvements in different functions of HR such as talent acquisition, employee engagement, performance management, compensation and benefits and several others. HR assumes a significant part in business results, and using information gives a critical benefit as far as business decision making is concerned. Organizations are forming groups who are experts in Analytics, quickly supplanting the traditional administrative frameworks, and making HR inclusive of analytical to make better informed decisions and strategies. The Human Resource work is presently moving from an administrative function to a system of collaboration, implying that innovation is significantly impacting the manner in which HR connects with the representatives as well as the partners. However, the utilization of analytics is a long way from new, an ever-increasing number of enterprises have acknowledged that beyond two years that information can further develop both HR capacities and business processes in general. The study concludes that there are number of Benefits and challenges of Transforming Human Resource Management with HR Analytics like Lack of interest and support from the business and management, Lack of





interest and support from the business and management, Lack of training skill development program to handle HR Analytics, HR Analytics gathers and deciphers employee related information and help them to perform better and HR Analytics carry out complex tasks and help to prepare future strategies. It is also found that there is a significant impact of Transforming Human Resource Management with HR Analytics on an organization.

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## Factors Affecting the Effectiveness of HRIS (Human Resource Information System) :- An Empirical Study

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### Abstract

The system and the process of the connection between human resource management and information technology are called “Human Resource Management System” or “Human Resource Information System”. It is also known as the software packages that deal with the requirements of Human Resources related to the planning, access to employee information, and employer regulatory compliance. The “Human Resource Information System” is an online solution or software for the entry of data, tracking of data, information of data required by Human Resources, management of payroll, and accounting functions within an organization or a business. It helps in merging Human Resource Management as a restraint and the basic activities and processes of Human Resource with the information technology. In present times, an essential instrument for business organization is “Human Resource Information Systems (HRIS)”. Sample of 226 people from the HR department of different organization were surveyed to know the factors and their impact on efficacy of HRIS (Human Resource Information System).

**Keywords:** Human Resource Information System (HRIS), Information Technology (IT), Human Resource (HR), IT Infrastructure, Management Support

### Introduction

“Human Resource Information System” or “Human Resource Management System” is a system involving various practices wherein HRM interacts with the Information Technology (IT). As suggested by (Akai and Fishbein, 2012) this system helps in enhancing and increasing the efficiency of Human Resource Management. Overall, the system of Enterprise Resource Planning has one common database known as a universal database that includes information pooled from distinct applications (Noussa, Wamba, & Kamdjoug, 2016) studied that appropriate storage of data is provided by Human Resource Information

System. Moreover, it is pointed out Human Resource Information System helps in the enhancement of the total quality management, the loyalty of customers, and innovation. Konana and Balasubramanian (2015) found HRIS helps in increasing the perfection and efficacy in all the undertakings of Human Resources that includes payments and other beneficial programs, appointment and selecting new candidates, and performance appraisal, development of employees, etc. The system helps in reducing the level of work for every department and also make sure the better utilization of resources, the tasks are done easily and completed easily, and other



processes are uniform in the department for persistent workflow. The Human Resource department overall is assigned with the essential role of ensuring persistent management of patterns of work, tracking of resources, and ensuring all the practices are completed on timely basis. Solutions have been provided based on applications of Information Technology that are readily accessible and will assist the unit in automation of most of their daily work and other difficult jobs in the firm. The "Human Resource Management System" is essentially illuminated in numerous principal areas of functionality of Human Resource. The practices evaluate the employees of work and the time it takes for the accomplishment of the job. Rules and strategies related to the establishment and management of organizational costs accounting competencies are provided by the module (Huang, 2015). The module of payroll offers the guidelines related to computerization and association of the organization's payroll, computation of various sections of the payment practices like time and attendance of employees, work-related to statutory deduction and taxes, quality checks related to payment are completed on time, and periodically manner. Human Resource Information System also helps in getting the information. It also provides easy access and examination for the strategic decision-making in the organization. The Human Resource Information System helps in improving efficiency and producing reports that are useful in the decision-making process of the organization. (Wijethilaka, 2016) concludes in a study that technological elements, organizational factors along with environmental factors have a significant effect on the execution of Human Resource Information System. Technology and environment were considered essential elements of Human Resource Information System factors. This study demonstrated that "Human Resource Information System" has a guaranteed impact on the performance of the organization. A direct impact of environmental factors can be seen in the adaptation of Human Resource Information System. The study shows a successful impact of the Human Resource Information System on internal environmental factors and external environmental factors. The objective of the research has been achieved, and it is confirmed that the elements of internal environmental and external environment are

significant for success of "Human Resource Information System".

#### Literature Review

Main purpose of implementing of Human Resource Information System in a company is to accomplish the competitive benefit in the market, making opponents stay away from the margin. Many organizations who have by now accepted Human Resource Information System are in a position of competition. According to **Hani (2013)**, many empirical researchers says that the pressure of competition is considered a powerful factor that force organization the adoption of Information technology and dispersion. In the meanwhile, as companies are moving towards the knowledge-based economy, the masses are growing continuously towards the reduction of Human Resource costs for the long-term also to play strategic role in firms. The company's structure must be recounted in facilitating or restraining the acceptance of innovation. It is revealed by few bounds like the centralization level of the organization and the level of specialization of employees within the form, and the enactment of diversified events inside the organization. In the stated boundary, the level of knowledge of employees is considered a strong element of criteria in the adoption of technology, particularly Human Resource Information System in the company. "Human Resource Information System" must be set up by the organizations with high network entailments for the enhancement towards the providing of services and increasing the level of performance in the daily work that helps in cutting off the cost of operating the department of human resource and also helps in increasing the efficacy and efficiency of the human resource department. Every company must focus on establishing qualified and specialized team of Information Technology an organization must get prepare automatic performance indicators that would enable them the interaction with the Human Resource Information System in the logical and essential way as the beginning point for the successful acceptance of Human Resource Information System by the competency of employees (**Khan, Hasan & Rubel, 2015**). Technical portent becomes a defining feature that supports society of the modern world irrespective of its political class. Techniques have become detached. The force of technology evolving at a high rate is ultimately overtaking us and will



persistently surpass us in due time. The focus of people is moving the entire world. It is believed that the technical transformation of the present society are developed in a universal method for the improvement of the potential of man and thus evade any kind of destruction (**Igbaria and Cavaye, 2012**). All such declaration are related to the execution of "Human Resource Management Information System" in context that at time of implementation of the system, it is the responsibility of the organization to evaluate the power and to accept the technology for the successful implementation of the system.

**Rahman, Qi & Jinnah (2016)** found that social influence leaves a direct and indirect impact on the adoption of "Human Resource Information systems". The indirect impact occurs from the intervening factor of behavioural intentions. A positive contribution to the type of strategies for the improvement of banking and financial services. There are both theoretical and managerial implications for this research study. **Kanake and Onyiego (2016)** revealed about the approaches and the issues related to the costs in the execution of the Human Resource Information System. It is also observed that new system has acknowledged negative feedback from the workers as they struggled with the transformations from manual to the automated system because of various challenges and issues that they face in the usage of Human Resource Information System. Some of other challenges that are faced by the universities are a lack of competent workers, higher costs of maintenance, and organizations are not ready to change their traditions. The findings of the study say that the organization must have clear aims and objectives about what they need to achieve for the enhancement of the Human Resource Information System. An organization must obtain the system that would help in serving their requirements, ensuring that they have sufficient resources required for setting up of Human Resource Information System. The staff of the organization needs regular training that would make them more familiar with the technology and also guarantee Human Resource skilled workers can work easily and competently with the system. The functions of the Human Resource Information System make easy the activities of Human Resources by making information easily available, deposited, recovered, evaluates, and modernised. HRIS makes a potential effect on

the profile of the company, containment of costs, and improvement in the performance and production of the company. With the proper utilization and usage of the Human Resource Information System, fewer resources would be needed for conducting Human Resource activities, which would give more time to the professionals of Human Resource to concentrate on information and understanding at the strategic level (**Lee, Lee, & Kwon, 2015**).

**Lee (2014)** conducted a study on the behavior of technology with reference to the implementation of technology. The findings of the study say that Human Resource Management has evolved and played strategic importance that is compassionate towards the fundamental goal of the given organization. However, some of these systems are unable to meet the requirement of the organization and do not meeting up with the set standards. This means that organizations must make themselves ready with the best tools, instruments, and application of technology.

**Fatuma (2014)** studied about the factors recognized that influence the proper implementation of HRIS. In a survey, participants accepted the truth that the support of top level management, effective style of communication and training, assistance of Information and Communication Technology and Human Resources, and the involvement of users makes a huge impact on the execution of Human Resource Information Systems communication between the workers and their managers must be motivated.

**Chapman & Webster (2013)** examined the usage of technology in hiring and selection of new candidates in the organization, and evaluation of the huge number of job applications and selection of the best out of them for the organization. The findings of the study shows three critical problems tackled by the Human Resources is playing the role of a strategic partner. The first challenge is related to the assistance and assurance from the higher level management team and the requirement of resource for the up gradation of the system. Another challenge was the management of functions related to the system and its complications. The 3rd problem is the user acceptance particularly the supervisors and workers, and the management of the transformations that occurs after the



implementation of a new system and its up gradation.

**Alam et al. (2016)** explored the elements that influence the decisions of management for the adoption of HRIS. The outcome of the study observed five major factors, which are a support of top management, infrastructure, perceived cost, staff capabilities, and pressure of competition. Furthermore, the most considerable dimension is technology, humans, organization, and environment. Finally, the work observed the presence of considerable differences in all the factors among different groups adopting the technology. Human Resource Information Systems is a huge investment in micro as well as medium-scale enterprise. Though, the companies must contemplate the advantages of such investment beforehand its implementation. From the perspective of employees, Human Resource Information Systems brings various financial advantages with them in an arrangement of documentation, management of leaves, payroll system, etc. Additionally, the organizational size of the organization makes a direct effect in the acceptance of Human Resource Information Systems (**Taylor & Francis, 2017**). Looking at the level of globalization, organizations are spreading the benefits of Human Resource Information Systems beyond all the boundaries. With the usage of the internet today multinational companies are jumping from their home country to another country. At present time, the internet is creating a drastic transformation to the conventional functions of Human Resource. Due to technological advancement Human Resource Information Systems have become a universal practice. Implementing Human Resource Information Systems successfully is needed for the achievement of desired outcomes. Or else, it becomes a loss of time, cost, and the efforts of the organization. Ineffectiveness of Human Resource Information Systems leads to the inefficiencies. Effective Human Resource Information Systems would lead to the achievement of a competitive edge in the industry.

**(Bullmash, 2015)** defines Human Resource Information Systems as an integrated structure that collects, stores, and interprets data related to Human Resource in an organization. According to the core idea of many researchers, Human Resource Information Systems is an integral system that tracks and manages the

Human Resource functions of the organization in an effective and efficient manner.

**Badhurudheen (2018)** concluded that internal environment elements like skills of social technology of CEO, upper grade manager's support, centralism, and the experience of Human Resource Information Systems makes a positive influence.

**Aldmour, Love, and Alzubi (2013)** studied about the willingness refers to the availability of resources and the capability of effective execution of Human Resource Information Systems. Further, the author also mentioned that the willingness has a considerable significance on the execution of technology in the context of an organization. Competency shows the skills, knowledge, and capabilities that are relevant to the implementation of Human Resource Information Systems. Willingness of technology refers to the effective adaptation of Information Technology and the coordination in a business organizations. Companies are likely to execute IT based technology with the usage of specific Information Technology department encompassed by a highly competent workforce. Furthermore, knowledge of Information Technology needs today's business operations. Competency and organizational readiness are considered to be crucial factors of internal environment including sub-components of corporates, technical support, structure of employees, level of education, etc.

Networking of technology usually facilitates the Human Resource Information Systems to go beyond the local where internet assists in expanding the level of Human Resource Information Systems all over the globe. With the assistance of these platform, the data of employees can be tracked by managers at any place and at any time within a few minutes. The value of management information systems got increased with the concept of global village. The major benefits of Human Resource Information Systems are attaining easy information, advantage of cost, enhancement of efficiency, and accessing better service. Likewise, improvement in data quality, systematic processing, speed, and providing trusted and desired outcome (**Anitha & Aruna, 2015**).

**Study's Objectives**





1. To ascertain the factors that affects the effectiveness of HRIS (Human Resource Information System)
2. Knowing impact of different factors on effectiveness of HRIS (Human Resource Information System)

**Research Methodology**

Sample of 226 people from the HR department of different organization were surveyed to ascertain factors and their impact on effectiveness of HRIS (Human Resource Information System). A structured questionnaire and random sampling method was used to conduct the survey and collect the primary data. Factor analysis was used to analyse the data of present empirical study.

**Findings**

Table 1 is showing demographic details of the respondents. It is observed that total 226 people were surveyed that includes male (57.1%) and female (42.9%). The respondents are of different age groups like Below 36 yrs (34.0%), 36-43 yrs (37.2%) and rest (28.8%) are above 43 yrs of age. 22.6% of them are working as HR Director, 27.4% as HR Manager, 30.5% of the respondents are HRIS specialists and rest 19.5% are working on other positions in HR department of different organizations.

**Table 1 Demographic Details**

Variable	Respondent	%
<b>Gender</b>		
Male	129	57.1
Female	97	42.9
<b>Total</b>	<b>226</b>	<b>100</b>
<b>Age</b>		
Below 36 yrs	77	34.0
36-43 yrs	84	37.2
Above 43 yrs	65	28.8
<b>Total</b>	<b>226</b>	<b>100</b>
<b>Designation</b>		
HR Director	51	22.6
HR Manager	62	27.4
HRIS specialist	69	30.5
Others	44	19.5
<b>Total</b>	<b>226</b>	<b>100</b>

**“Exploratory Factor Analysis”**

**“Table 2 KMO and Bartlett's Test”**

“Kaiser-Meyer-Olkin Measure of Sampling Adequacy”	of	.887
“Bartlett's Test of Sphericity”	Chi-Square	3852.028
	Df	190

“Sig.”	.000
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In the table above (Table 2) KMO measure of sampling adequacy is found to be .887 and the value in the significant is below 0.05.

**“Table 3 Total Variance Explained”**

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.073	40.366	40.366	4.501	22.506	22.506
2	2.719	13.596	53.962	3.844	19.221	41.727
3	2.406	12.032	65.993	3.461	17.305	59.032
4	1.622	8.111	74.105	3.015	15.073	74.105
5	.823	4.114	78.219			
6	.688	3.441	81.660			
7	.571	2.857	84.517			
8	.503	2.514	87.031			
9	.430	2.152	89.183			
10	.364	1.821	91.005			
11	.326	1.632	92.637			
12	.317	1.584	94.221			
13	.220	1.101	95.322			
14	.201	1.007	96.329			
15	.189	.946	97.275			
16	.163	.815	98.090			
17	.131	.654	98.744			
18	.123	.613	99.358			
19	.070	.348	99.706			

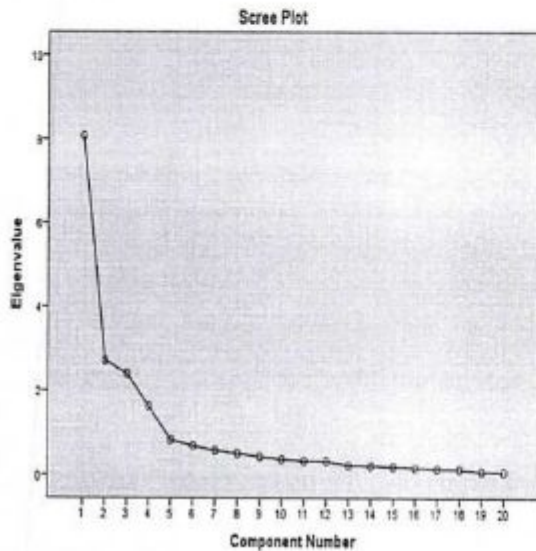


20	.059	.294	100.000		
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“Total Variance Explained” is demonstrated in table above (Table 3) where % of variance from factor 1-4 is shown as 22.506, 19.221, 17.305 and 15.073 percent respectively and all the four factors explain total 74.105 percent of the variance.

“Figure 1 Scree Plot”

Scree plot (Figure. 1) is graphical presentation of Eigen value found from “Total Variance Explained” (Table. 3). An elbow at 4 components is shown in scree plot which depicts that total 4 Factors have been extracted.



“Table 4 Factors, Factor Loading and Factor Reliability”

S. No.	Statements	Factor Loading	Factor Reliability
<b>IT Infrastructure</b>			.956
1.	Good internet and networking system	.864	
2.	Proper telecommunication system enhances the effectiveness of HRIS	.863	
3.	Dedicated department to look after the IT issues in HRIS system	.857	
4.	Infrastructure capable to collect and analyse the business data using technology	.843	
5.	IT infrastructure to handle safety and privacy of the organization while working with HRIS	.801	
<b>Management support</b>			.920
6.	Co-operation of top management and seniors	.887	
7.	Management support to provide training to staff	.883	
8.	Management initiative to adapt the new technology and system	.858	
9.	Committed management to implement to HRIS system	.852	
10.	Management strategies to use HRIS to make their decisions better	.639	
<b>Staff and their capability</b>			.904
11.	Proper IT training is must for HRIS to work	.892	
12.	Time to time upgradation in IT skills for HRIS staff	.869	
13.	Staff's willingness to adapt change in work flow	.860	
14.	Committed workforce to work through HRIS system	.674	
15.	Sufficient IT knowledge is essential to work with HRIS	.633	
<b>Expenditure and Market Competition</b>			
16.	Organization ready to afford the expenses in implementation of HRIS		

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17.	Company's operational cost bearing capacity affects the effectiveness of HRIS	.723	
18.	Investment in HRIS implementation make the organization cost effective in future	.716	
19.	Organization's willingness to invest to get competitive advantage	.715	
20.	Operational excellence, development of new products, customer satisfaction etc. increase the effectiveness of HRIS	.678	

### Development of the factors

IT Infrastructure is factor number one which includes the variables like good internet and networking system increase the effectiveness of HRIS, Proper telecommunication system enhances the effectiveness of HRIS, Dedicated department to look after the IT issues in HRIS system, Infrastructure capable to collect and analyse the business data using technology and IT infrastructure to handle safety and privacy of the organization while working with HRIS. Second factor is named as Management support which includes the variables like Co-operation of top management and seniors, Management support to provide training to staff, Management initiative to adapt the new technology and system, committed management to implement to HRIS system and Management strategies to use HRIS to make their decisions better. The third factor extracted is Staff and their capability which includes the variables like Proper IT training is must for HRIS to work, Time to time upgradation in IT skills for HRIS staff, Staff's willingness to adapt change in work flow, committed workforce to work through HRIS system and Sufficient IT knowledge is essential to work with HRIS. Fourth and the last factor is Expenditure and Market Competition which consist of variables like Organization ready to afford the expenses in implementation of HRIS, Company's operational cost bearing capacity affects the effectiveness of HRIS, Investment in HRIS implementation make the organization cost effective in future, Organization's willingness to invest to get competitive advantage and Operational excellence, development of new products, customer satisfaction etc. increase the effectiveness of HRIS.

### Reliability of the factors

#### "Table 5 Reliability Statistics"

Cronbach's Alpha	Items
.911	20

Factor wise (1-4) reliability is shown in table 4 above as .956, .920, .904 and .789 respectively and total reliability statistics (table 5) is shown above which says that total reliability of all the 20 items is .911.

### Conclusion

For the strategic contribution Human Resource Information Systems in present time has become a global Human Resource practice in the developed countries. Regardless of the fact that "Human Resource Information Systems" is an encouraging aspect and its adaption into banking and finance industries is still a challenge in developing countries. Successful adoption of Human Resource Information Systems involves manager and end user engagement. It is the responsibility of the managers to look around for the move of the competitors and the leaders of the market to get the understanding of the technological adoption that they are making in their organizations. Speedy adoption of Human Resource Information Systems would give an organization a similar competitive advantage in front of their competitors. At the present time the micro as well as medium level enterprises are rapidly adopting the Human Resource Information Systems and considering it as an investment. However, before the adoption and implementation of the technology, the organizations must consider the returns. Appropriate and proper application of Human Resource Information Systems helps companies in the achievement of their goals. Today "Human Resource Information Systems" has become an essential part of the organization.

The study concludes that IT infrastructure, Management support, Staff and their capability and Expenditure and market competition are the factors that all together affects the effectiveness of HRIS (Human Resource Management System). It is also found that there is a significant impact of all the factor like IT infrastructure, Management support, Staff and



their capability and Expenditure and market competition on effectiveness of HRIS (Human Resource Information System).

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## “HUMAN RESOURCE RECRUITMENT AND SELECTION IN IT SECTOR ”

<sup>1</sup>Dr. Swati Singh <sup>2</sup>Dr. Manisha Khaladkar

### Abstract

The success of an organization depends heavily on the people who work there. An organization cannot progress and succeed without positive and creative contributions from people. Therefore, in order to achieve the goals of the organization, it is Recruitment is a very important factor in increasing the profitability or business development as recruitment helps in choosing the suitable candidates for the available vacancies.

The main purpose of doing this research is to understand the process of recruitment and selection that takes place in an organization. This survey was conducted to analyze recruiting and selected positions within the organization. Meanwhile, selection is the process of pre-screening, reviewing, prioritizing, and shortlisting applicants to identify the most suitable candidate for the job. The aim is to filter and on board candidates with the right behavioral traits, attitude, and domain knowledge to fulfil the task efficiently. The two processes go together in hiring the most relevant candidates.

Attracting a large number of applicants ensures that the company has a vast candidate pool to choose the desired candidates. Talent acquisition specialists can then employ various methods to hire a suitable candidate. Recruitment is the process of attracting quality candidates to fill existing job openings. The process may include advertising job openings through social media, professional associations, and career- related websites. Through recruitment, hiring managers reach out to the potential and passive job applicants and encourage them to apply for available openings.

**Keywords:** Recruitment, selection ,job enhancement

### Introduction:

Recruitment is an ongoing process, and certain vacancies are not resolved, and the company seeks to develop qualified candidates to meet the needs of future human resources. Typically, the recruitment process begins when an administrator starts recruiting staff for a specific vacancy or expected vacancy. Candidate recruitment is a preceding function, which helps to create a pool of prospective employees for the organization and allows managers to select the right candidates for the right jobs in this pool. The main goal of the recruitment process is to facilitate the selection process Recruitment is almost central to all management processes, and failure to adopt leads to organizational difficulties, including the impact on profitability and inadequate levels of people and skills. Incorrect recruitment can cause labor shortages or problems in management decisions.

### Need for recruitment

It is possible to select the right person in the right place at the right time. You can also get the people and types you need to ensure your organization's ongoing operations. Vacancies: promotion, transfer, retirement, retirement, permanent disability, death and turnover. Creation of new rooms: for the growth and diversification of business activities of enterprises. A new vacancy may also occur by appointment. Factors Effecting Recruitment:

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## Phalanx: A Quarterly Review for Continuing Debate

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All organization whether small or large they engaged in recruitment activities, though not with same extent. This differs with

- Size of organization.
- Working conditions, salaries and benefit packages provided by the organization.
- The employment condition of the community in which the organization is located.
- The rate of growth of the organization
- The organization's ability to find and retain talented individuals of outstanding achievement.

### Literature Review:

Aakash Gopalia (2004) - This research paper, studies the recruiting case of Tesco to assess how effective the E-recruitment is. This study used to theory-build approach. E-recruitment cuts the costs compared to traditional recruitment and its effectiveness can be used by other organizations throughout different industries.

Ms. D Shahila & Ms. R. Vijayalakshmi (2013)- This research paper, studies the usage of trends, challenges, methods and practice in e-recruitment. Organizations use E-recruitment for job postings and hiring. Many of the applicants find the process easier as the companies provide value added services.

Sree Lakshmi.J & Dr.A.Ravi (2013)- The main theme of the study is to select the right person for the right job through E-Recruiting the recruiters filter the candidate and select the candidate and the persons were selected in E-recruiting is call for an interview. Based on the interview process followed in the particular organization they may select the candidate for their organization. E-recruiting is hiring potential candidates with various processes like Screening of resume, online tests, etc.

Dr. Ankita Jain, Ankita Goyal (2014)- This paper determines what all E-Recruitment strategies are used by the organizations in India after being globalized. This study was conducted in few of the reputed banks in Jaipur, India. It studies on the processes of re-recruitment along with its methods. It further studies about the challenges and advantages

### Objectives:

- To provide necessary information about the procedures of Recruitment and Selection techniques used in IT sector.
- To collect information and insight about the Recruitment & Selection function of the organization.
- To assess the effectiveness of the process practiced by IT companies.

### Research Methodology:

Data using personal interviewing techniques are collected through self-designed surveys. The main data collection for his purpose should be done by judging sampling conversation. Data was collected from Web sites, going through records of the organization, Books, Journals etc. The study is conducted in a systematic procedure starting from selection of the topic to final report preparation. The important part was to identify and collect data. They were classified, analyzed, interpreted, and presented in a systematic way to find important points. The overall

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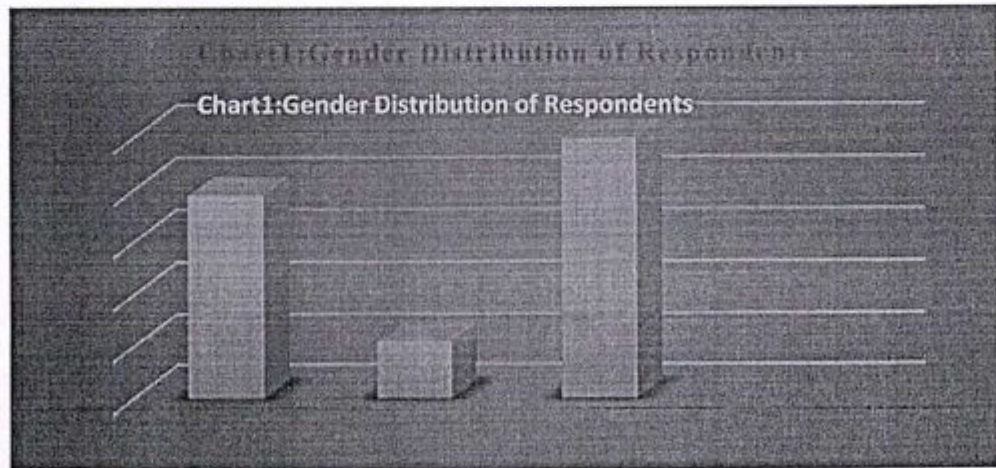
process of the methodology followed in the study is explained further. In this research work, the data has retrieved from 50 employees sample sizes. Data collected from sources is analyzed and interpreted systematically with the help of statistical tools such as percentages.

**Result & Discussions:**

**Result & Discussions:**

**TABLE: GENDER WISE**

Response	No. of Responses	Percentage
Male	39	78%
Female	11	22%
Total	50	100%



**Analysis & Interpretation:**

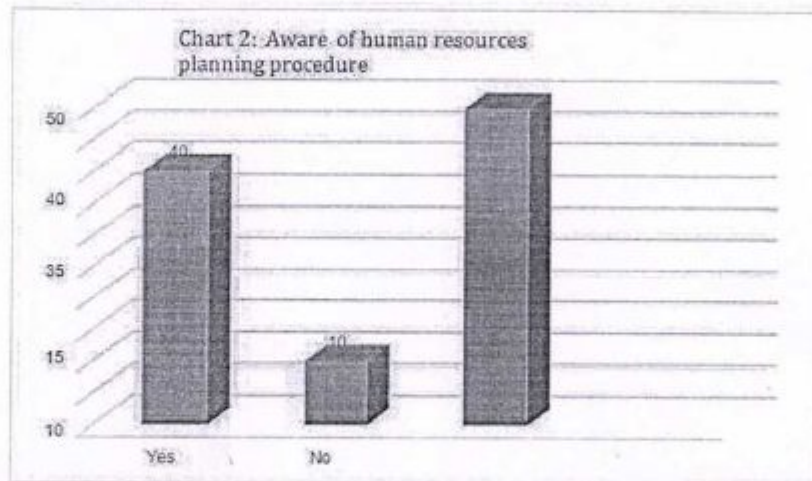
From the above table it is evident that 78% of the respondents were males and 22% of the respondents were females.

**TABLE 2: AWARE OF HUMAN RESOURCES PLANNINGPROCEDURE**

Response	No. of Responses	Percentage
Yes	40	80%
No	10	20%
Total	50	100%

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**Analysis & Interpretation:**

From the above table it is evident that 80% respondent are aware of human resources planning procedure and 20% respondent are not aware of human resources planning procedure .

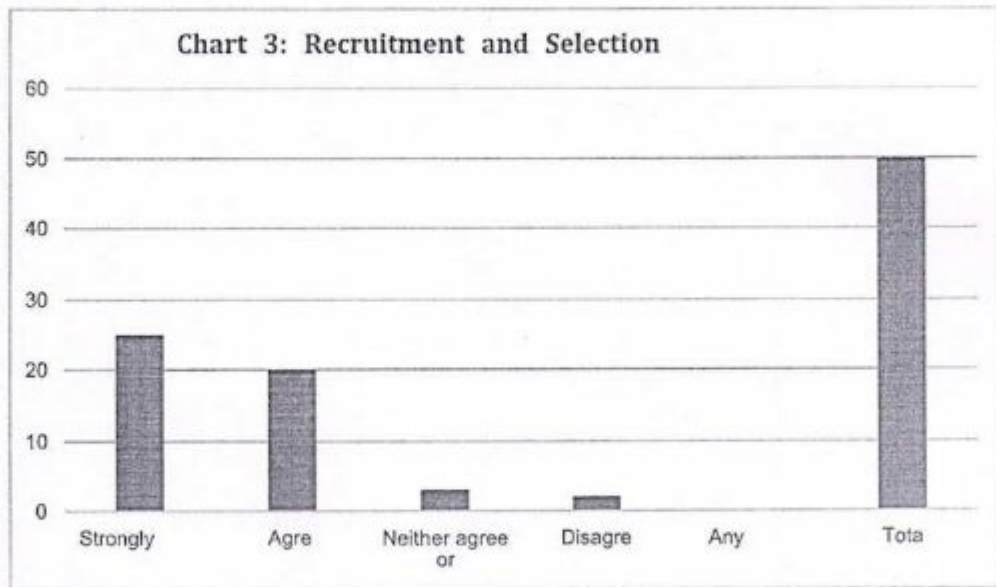
**TABLE 3: RECRUITMENT AND SELECTION ARE DONE SYSTEMATICALLY**

Response	No. of Responses	Percentage
Strongly Agree	25	50%
Agree	20	40%
Neither Agree nor Disagree	03	6%
Disagree	02	4%
Total	50	100%



*(Handwritten signature)*





**Analysis & Interpretation:**

The above chart shows that 50% of respondent strongly agree that recruitment and selection are done systematically and 6% are neutral towards the recruitment and selection which is are done systematically.

**TABLE 4: MODE OF SELECTION**

Response	No. of Responses	Percentage
Written Test	20	40%
Interview	22	44%
Both	06	12%
Merit Only	02	04%
Any other	00	00%
Total	50	100%

**FINDINGS**

- The study depicts that 80% respondent are aware of human resources planning procedure and 20% respondent are not aware of human resources planning procedure.
- The study depicts that 50% of respondent strongly agree that recruitment and selection are done systematically and 6% are neutral towards the recruitment and selection which is are done systematically. The study depicts 44% of the respondent says mode of selection is through Interview, 40% respondent says that mode of selection is through written test, and 4% respondent says that onmerit selection.
- The study depicts that 40% of the respondents says that four stages involved in selecting candidate and 30% of the respondents says there are 2 stages are involved in selecting the candidate.



- In the survey, 50% of the respondents said that the effectiveness of the interview process and other selection measures such as testing is adequate, and 42% of respondents said the equipment is excellent, including the evaluation of the effectiveness of the interview process and other choices.
- The study depicts that 52% of the respondents says that internal recruitment vacancies are declared publicly, 20% of the respondents agree to the internal recruitment vacancies are declared publicly and 10% of the respondents are disagree to the internal recruitment vacancies are declared publicly.
- The study depicts that 84% of the respondents says yes that they are satisfied with the program of induction and orientation in your company and 16% of the respondents says no that they are not satisfied with the programmer of induction and orientation in your company.
- The study depicts that 46% of the respondents says that main motive behind choosing the job at is at career growth, 20% of the respondents says that main motive behind choosing the job Saver is through skill enhancement, 18% of the respondents says that main motive behind choosing the job at is for knowledge gaining.
- According to the survey 42% of respondents provide HR qualified good applicants responded that they provided the right candidate
- The study depicts that more of the respondents agree that are satisfied with the training procedure given in the Organization, and 6% of the respondents who are satisfied with the training phase given to the organization do not object to not being satisfied with the training level given to the organization.
- The study depicts that 48% of the respondents agree to succession planning is in advance in , 30% of the respondents strongly agree to succession planning is in advance and 12% if the respondents neither
- Agree nor disagree to succession planning is in advance and 6% of the respondents disagree to succession planning is in advance.
- According to the survey, 36% of the respondents who answered that job description and job specification HR are clearly defined in the recruitment process, and job description and job specifications in the recruitment process clearly define the HR. We clearly define job content.

### Conclusion

This helps to understand the various aspects of the organization and how the organization works and how to identify and solve problems. The organization's recruitment sources are based on factors, both internal and external. The recruitment of candidates for a particular post depends on the age, experience, qualifications, and percentage of the academic year. The selection process is entirely based on communication skills and technical qualities. Human resources are becoming an integral part of an organization. Work, functions, tasks, and tasks may be performed by a skilled person skilled in the art. When the number of members of the organization is aware of the more appropriate recruitment and selection process that can make a choice of human resources in the right way.

The employed individual may have experience and knowledge, but how to change with in the organization about various aspects such as working conditions, attitudes and behavioral characteristics of job-performing employers, how to increase productivity, the use of



innovative technologies, and so on. When an employee is selected, it must be dedicated to a loyal organization. They must attempt to perform their duties and have the qualities of wit, diligence, and conscience. Finally, it may be said that organizations are required to practice recruitment and selection processes with accuracy, accuracy, and truth.

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## Effectiveness of You Tube advertisement in purchase decision

**Shamli A Joshi and Bhagyashree A Joshi**

### Abstract

As the world is moving towards digitalization, brands have also evolved with time, in terms of their marketing strategies. YouTube is a very common & extensively used platform for well established brands to market their product. A lot of deliberation has been done on the question, i.e., do these advertisements actually drive sales / drives customer to purchase the product, or does it simply create awareness about the product & the brands. YouTube is the second most visited website globally, after Google search. This gives a concrete platform for brands to showcase their products & reach out to a large number of audiences.

This research aims to study the effectiveness of these advertisements in driving customers towards purchase decision. Various factors such as the content, audio / visual, performing artist, product information etc is taken into consideration while measuring the effectiveness of YouTube ads. This research will be beneficial for brands in understanding whether YouTube platform is an appropriate mode of marketing their product or not, given their objective is to increase sales.

**Keywords:** Effectiveness, purchase decision, You Tube advertisement

### Introduction

**Table 1:** About YouTube Advertisement

	Skippable in-stream	In-feed	Non-skippable in-stream	Bumper	Outstream
Selling point:	Users can skip so you are only charged for views	Shows to highly engaged users in the discovery and searching phase	Users can't skip so they view your whole message	Quick message that can't be skipped to raise awareness or reinforce other ads.	Raise awareness to users outside of Google when they are browsing their favorite sites
Where does it serve?	YouTube videos, GVP	You Tube Home feed, YouTube Search	YouTube videos, GVP	YouTube videos, GVP	GVP
Max video length?	No max length (less than 3 mins recommended)	No max length	15-20 seconds	6 seconds	No max length
Views reported in Google Ads?	Yes	Yes	No	No	Yes
Can increment public view count?	Yes (videos less than 10 seconds will not)	Yes	No	No	Yes
Can remarket to viewers?	Yes	Yes	No	No	Yes

\*Source: YouTube Help (<https://support.google.com/youtube/answer/2375464?hl=en>)

### Objectives

- 1) To understand effectiveness of ads on the basis of Content, Audio/visuals, performing artists, product information.
- 2) To identify if customers were persuaded to buy the product or not.

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Table 2: Literature Review

Sr. No	Title of Paper	Name of Author	Remark
1	Evaluating The Effect of YouTube Advertising towards Young Customers' Purchase Intention	Dhiyaa Nadhifa Aziza, Rifelley Dewi Astui (Indoneasia)	Age group – 18 to 29 to analyze the factors of YouTube advertising (e.g. entertainment, informativeness, customization, and irritation) and their impact on perceived YouTube advertising value; and to evaluate the effect of YouTube advertising towards customers' purchase intention.
2	Effectiveness of YouTube advertisement among viewers in Chennai City	N Sukanya, S. Subbulakshmi	This study suggests that most watched videos should be chosen for giving ads so that numerous viewers watch the advertisement effectively.
3	Millennials' attention and retention to You Tube advertisements in Nigeria	Evaristus Adesina, Mowaninuoluwa Owoye, Babatunde Adeyeye, Yartey Darlynton, Stella Aririguzoh, Thelma Ekanem	This study seeks to find out the millennials' attention and retention towards advertisements on the YouTube platform and how advertisers utilize this knowledge to effectively influence the purchase decision of the millennials. The study is anchored on the Individual Differences Theory.
4	YouTube advertising value and its effects on purchase intention	Duyug Firat	Age group – 18 to 29. Study focuses particularly on intension of purchase & not the decision of purchase.
5	Creating Brand Awareness Through YouTube Advertisement Engagement	Arman Hj. Ahmad, Izian Idris, Jian XiangWong	Aims to investigate & examine the relationship & importance of consumer engagement in YouTube advertisement toward consumer's brand awareness
6	The Persuasive Power in Virtual Reality Advertising on YouTube	Achini Ranaweera	Usage of virtual reality in youtube advertisement.
7	TV vs. YouTube: TV Advertisements Capture More Visual Attention, Create More Positive Emotions and Have a Stronger Impact on Implicit Long-Term Memory		A comparative study between TV ads & Youtube ads its impact on the audience memory.
8	A study on consumer attitude towards youtube advertisement	Dharah Mevada* Dr. Haresh B Vaishnani**	Consumers are influenced more with ads have entertaining content.

Table 3: Research Methodology

Parameter	Methodology
Type of Research	Descriptive Research
Sampling Type	Probability sampling
Sampling Method	Simple random sampling
Population	Infinite
Sample Size	384
Method of data collection – Primary Data	Structured questionnaire
Secondary Data	YouTube Web

Table 4: Data Analysis & Interpretation

1. Age

Age	Respondents	Percentage
21-30	171	45%
31-40	122	32%
41-50	66	17%
50+	25	6%
Total	384	100%

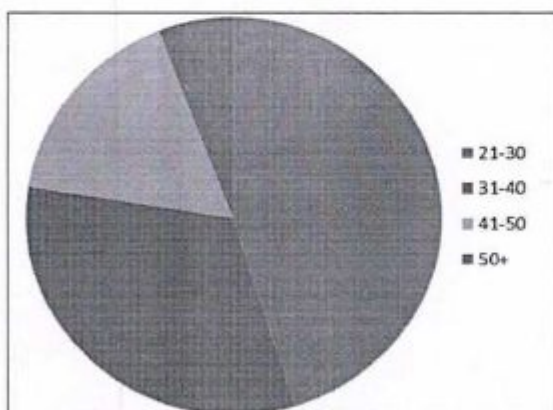


Fig 1: Age

The age groups of 21 to 30 & 31 to 40 are more active in terms of YouTube streaming, as compared to 41 & above. Usage of television is common in every house hold, especially for people aged 40 & above.

Table 5: Awareness about types of YouTube Advertisement

Type of advertisement	Respondents	Percentage
Skippable in-stream	384	100%
In-Feed	290	22%
Non Skippable in stream	384	100%
Bumper	144	29%
Outstream	100	8%

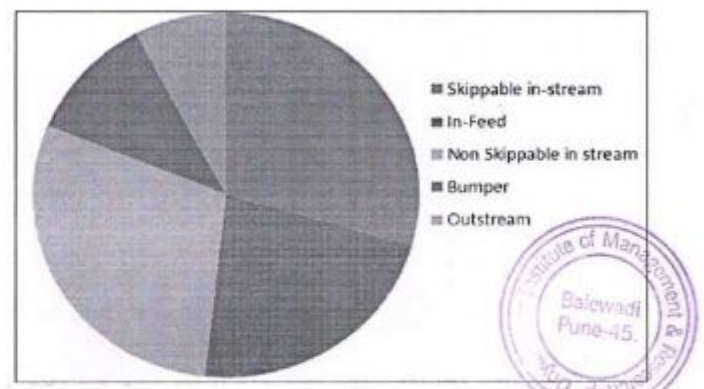


Fig 2: Types of You Tube advertisement

All respondents are aware & familiar with the Skippable & non-Skippable ads. There is a comparatively less number of respondents having awareness about the 'in-feed' advertisement which is shown to highly engaged users, 'Bumper' quick messages which cannot be skipped & 'Outstream' ads shown to users outside Google when they are browsing their favourite sites.



Table 6: Rating of the advertisement on the basis of content or script

Age of Respondents	Rating 1	Rating 2	Rating 3	Rating 4	Rating 5	Total No of Respondents
21 - 30	3	17	25	30	96	171
31- 40	7	10	18	32	55	122
41- 50	2	10	34	11	9	66
50+	4	12	4	2	3	25
Total	16	49	81	75	163	384

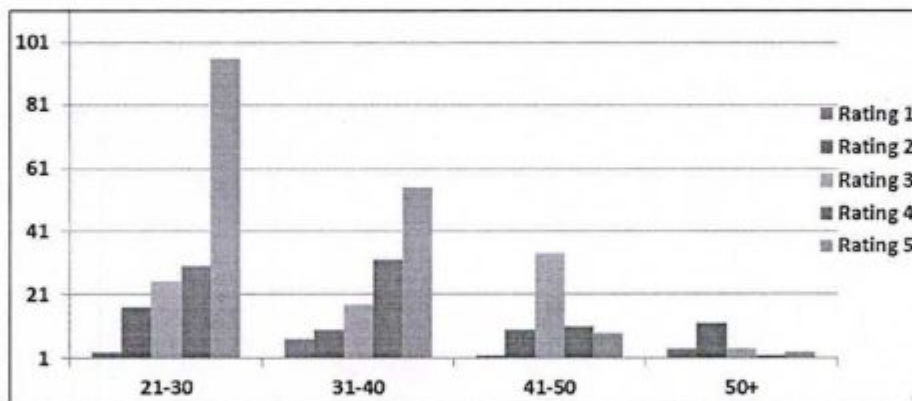


Fig 3: Rating 5 being the highest and Rating 1 being the lowest

The content, script and dialogues form the foundation of any advertisement. It is a direct representation of the brands image, reflection of their ideologies & perception about the public. The content being used today is more 'Youth

Centric' and curated as per the latest concepts which are currently trending among the younger generation. As per the survey, maximum rating received for content & script is from age group 21 -30, followed by second highest rating from age group 31-40.

Table 7: Rating of the advertisement on the basis of audio & visuals

Age of Respondents	Rating 1	Rating 2	Rating 3	Rating 4	Rating 5	Total No of Respondents
21 - 30	5	9	21	52	84	171
31- 40	0	9	18	74	21	122
41- 50	0	5	6	17	38	66
50+	1	1	9	4	10	25
Total	6	24	54	147	153	384

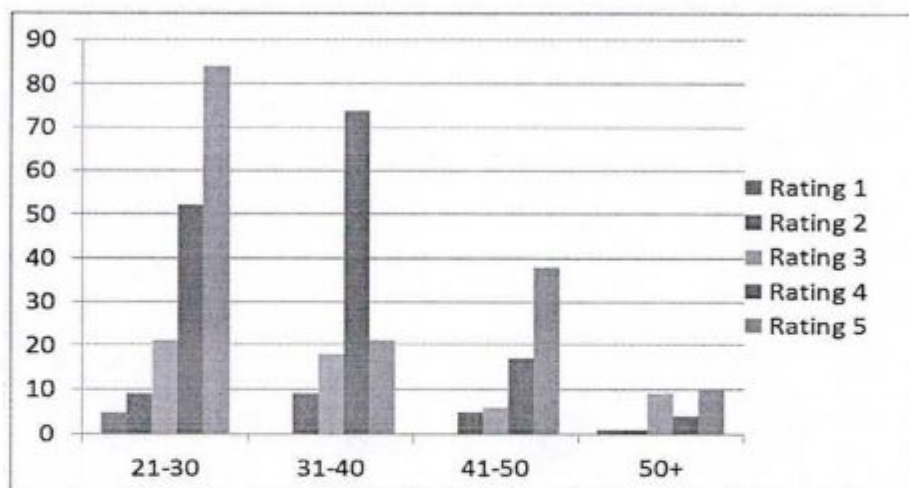


Fig 4: Rating 5 being the highest and Rating 1 being the lowest

Brain receives maximum information through the sense of hearing / listening, along with the sense of vision, or looking / seeing. The sense of sound & vision processes information faster than any other sensory organ. Advertisements consist of music or sound along with various graphic, videos

generated through AI or high definition films of actual products. Perfect combinations of audio & visual makes product look more appealing, than it is in reality. Maximum rating has been received from all age groups for these factors. Age group 31-40 has given second highest rating.

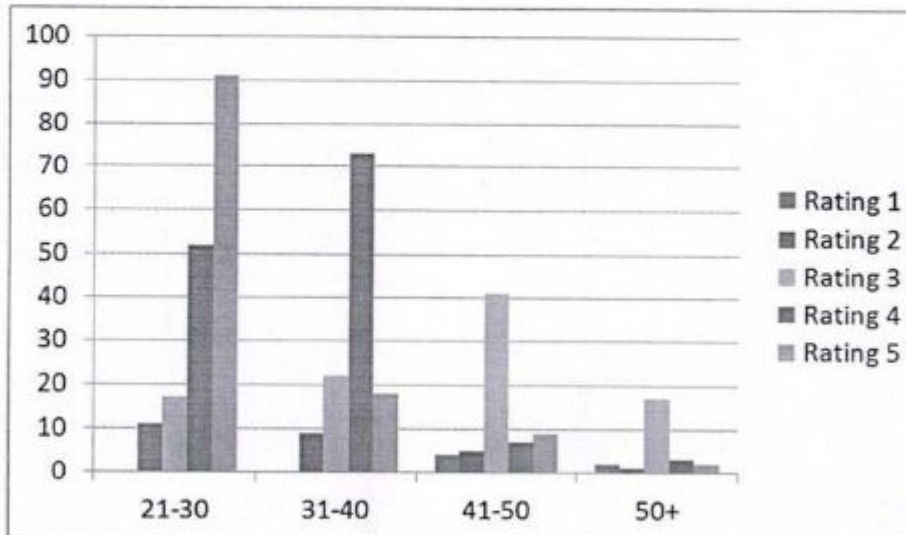


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**Table 8: Rating of the ads on the basis of performing artist / influencer**

Age of Respondents	Rating 1	Rating 2	Rating 3	Rating 4	Rating 5	Total No of Respondents
21 - 30	0	11	17	52	91	171
31- 40	0	9	22	73	18	122
41- 50	4	5	41	7	9	66
50+	2	1	17	3	2	25
TOTAL	6	26	91	135	120	384



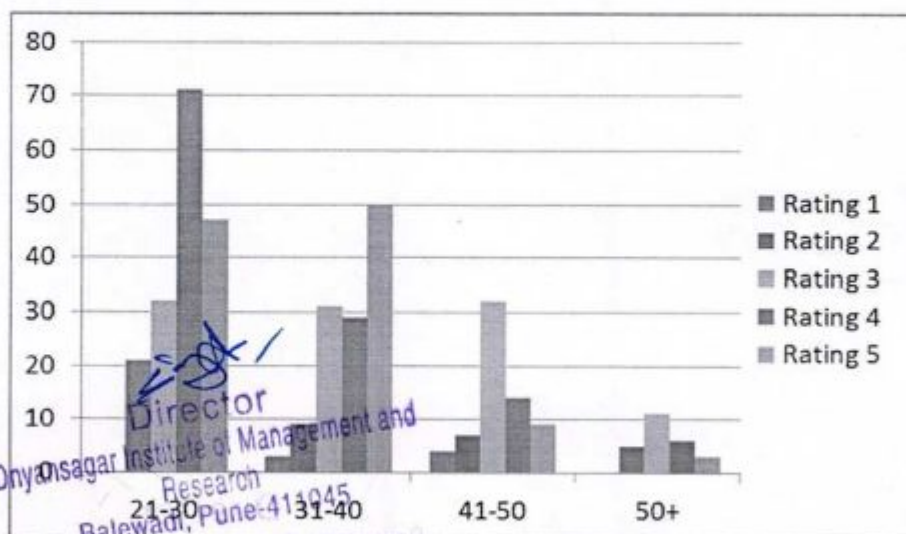
**Fig 5: Rating 5 being the highest and Rating 1 being the lowest**

Face of the brand, known as 'Brand Ambassador' feature in the advertisements as a representation. While some companies keep only one face of their brand, some companies choose to change the artists / influencer for every campaign.

These influencers play a major role in changing viewer's perception of the brand & it also ensures that the viewers keep watching the ads without skipping it. Thus, performing artists or influencers play a major role in advertisement campaigns. As per above table, respondents gave highest 4 rating in this category.

**Table 9: Rating of the ads on the basis of product information**

Age of Respondents	Rating 1	Rating 2	Rating 3	Rating 4	Rating 5	Total No of Respondents
21 - 30	0	21	32	71	47	171
31- 40	3	9	31	29	50	122
41- 50	4	7	32	14	9	66
50+	0	5	11	6	3	25
TOTAL	7	42	106	120	109	384



**Fig 6: Rating 5 being the highest and Rating 1 being the lowest**

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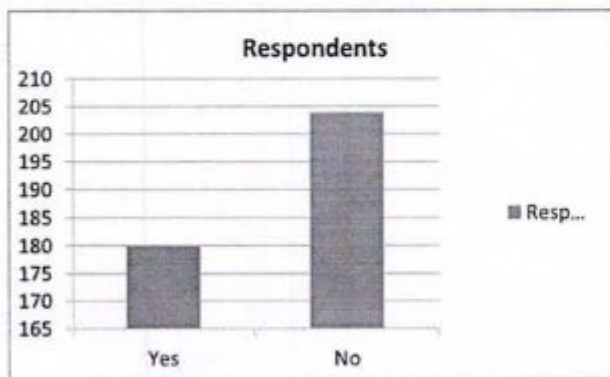




Literate consumers are concerned about the product information, as they purchase products only after complete understanding about its contents, specification etc. Advertisements highlight 3 or 4 important pieces of information which can gain the customers interest.

**Table 10:** As a viewer, did it persuade you to purchase the product displayed in the advertisement

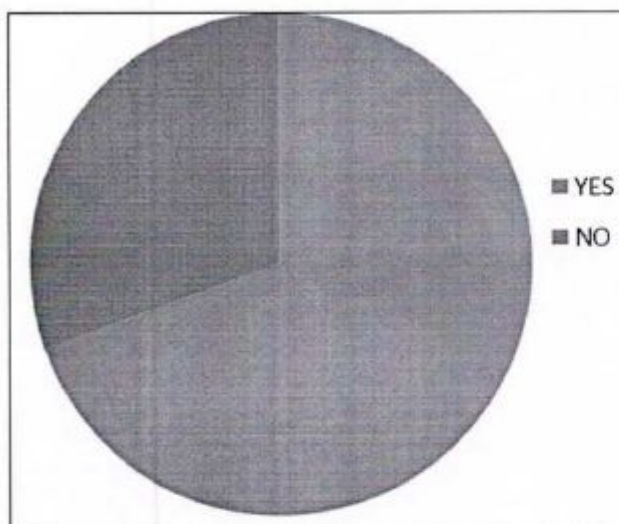
Response	No of Respondents	Percentage
Yes	180	49%
No	204	51%
Total	384	100%



**Fig 7:** Persuasion to purchase the product, main agenda of advertisement, was fulfilled. As per the survey, 49% consumers responded on a positive note.

**Table 11:** As a consumer, did the advertisement influence or change your opinion about the brand/product shown in the advertisement.

Response	No of Respondents	Percentage
Yes	267	70%
No	117	30%
Total	384	100%



**Fig 8:** Influence on opinion

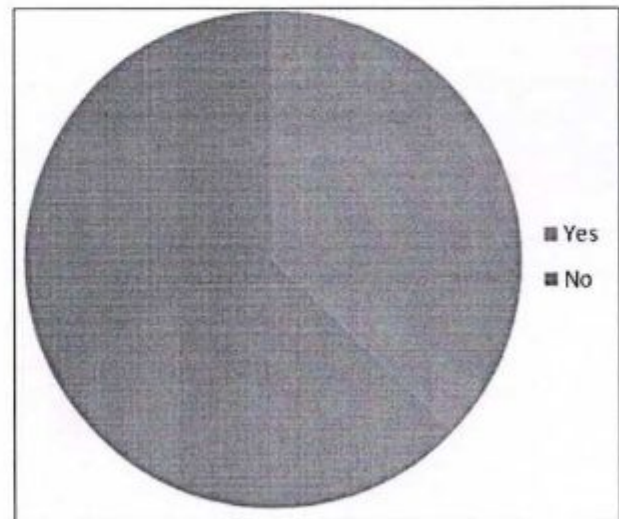
Influence' (The capacity to have an effect on the character, development, or behaviour of someone or something, or the effect itself.)

Today, any content that is posted on the internet consists of psychological triggers in various forms, which may slightly change the perception or opinion about the brand in the viewer's mind. 70% admitted that their opinions changes,

whereas, 30% people showed no impact of the advertisement on their opinions.

**Table 12:** As a consumer, do you spontaneously respond to the discounts or offers mentioned in the advertisement

Response	No of Respondents	Percentage
Yes	143	36%
No	241	64%
Total	384	100%

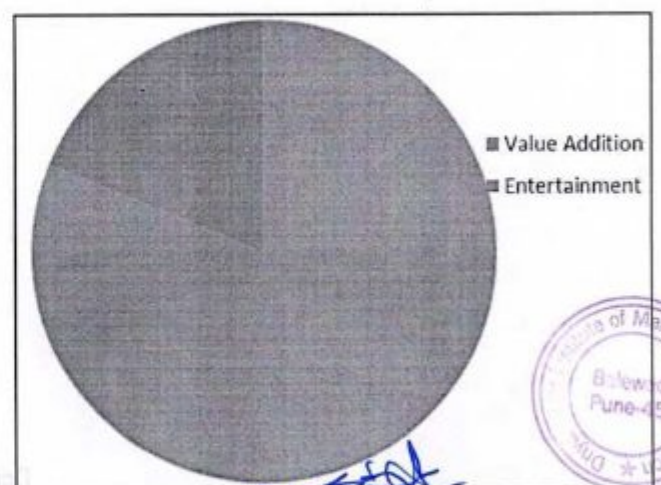


**Fig 9:** Response

Advertisements not only provide information about the product, but also announce various offers or discounts which may be valid only for a certain period of time. 37% respondents react spontaneously after viewing the discount offers, whereas 63% people do not react, irrespective of offers or discounts.

**Table 13:** Does the advertisement add any value to your shopping experience, or are they referred only for entertainment purpose

Response	No of Respondents	Percentage
Value Addition	312	82%
Entertainment	72	18%
Total	384	100%



**Fig 10:** Advertisement outcome

Advertisements generally serve either as an entertainment video or it adds value to the product information / awareness. 81% respondents experienced that advertisements do add



value to their information, whereas 19% respondents felt that advertisements serve merely as entertainment.

### Findings

- YouTube being the second most browsed website across the world, has provided a global platform for brands to reach out to maximum customers.
- The Age groups of 21-40 are consumers of today & will develop a good brand recall memory in the future.
- 49% of respondents were persuaded to purchase the product, which is a good outcome.
- Audio/visuals, content & discount offers in the advertisement play a major role in brand development.
- Massive reach, power of persuasion & brand image building are the 3 main factors that are being fulfilled through Youtube advertisements.

### Conclusion

YouTube is a media platform which is accessible to the masses, free of cost. India, which is also considered as a market place of the world, holds immense potential & buying capacity in all forms of consumer class. Advertisements, when done with proper strategy formation by the brand can prove to be the most useful tool for marketing.

The study is conducted through respondents which cover all age groups. Through this, brands can understand the perception of each age group & segment their marketing practices in line with customer preference. Advertisements are great to create brand recall value, and brands like Amul, Parle, TATA, Vodafone etc have been successful in doing so.

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## A Comparative Study of CSR Initiatives in Private Sector Banks

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### Abstract

In the recent years the concept of Corporate Social Responsibility is spreading very rapidly in India in all the sectors. Corporate Social Responsibility is to contribute towards the society while working with in ethics. In developing country like India, banking sector plays a very important role in upgrading the economy of the country not only by lending money or increasing the liquidity in the country but also by imposing a new practice called corporate social responsibility (CSR). RBI played a important role in supporting the concept of CSR by passing a circular in the year 2007, December, directed banks to undertake CSR initiatives for sustainable development .The Banking sector is in a leading position in discharging CSR in the country. This paper tries to enlist various initiatives taken by the banking sector in the current era with respective to CSR and its reporting along with its future scope.

**Key Words:** CSR Practices, Banking Sector, CSR Reporting

### INTRODUCTION

This is the time of industrialization and commercialization of the entire service sector. All the Companies are moving forward for the profit maximization and the profit which they are gaining it is from the society so the companies must take it as obligation towards the society which is to be repaid in terms of social banking towards the benefit of society. This social Banking means to contribute for the society while conducting the work within the boundary of ethics and that is called Corporate Social Responsibility. The CSR practices have been started



a long time ago but in India its speed of implementation were very slow. At present there is an increasing awareness about CSR, Sustainable Development and Non-Financial Reporting, the credit goes to RBI in focusing the CSR practices in Indian Banking Sector, by passing a circular in the year 2007, December, directed banks to undertake CSR initiatives for sustainable development.

According to Michael Hopkins (2003), CSR is concerned with treating the internal and external stakeholders of the firm ethically or in a socially responsible manner and the wider aim of corporate social responsibility is to create higher and higher standards of living, while preserving the profitability of the corporation, for its stakeholders.

The CSR phases as its development can be divided in to four phases are as follows:

**Phase I (Till 1914)** - The oldest form of CSR was motivated by charity and philanthropy with direct influence from culture, religion, family tradition, and industrialization process.

**Phase II (1914-1960)** - Dominated by the country's struggle for independence and influenced fundamentally by Gandhi's theory of trusteeship for consolidation and amplification of social development. Gandhi's reform programs which included activities that sought in particular abolition of untouchability, women's empowerment and rural development.

**Phase III (1960-1980)** - The paradigm of mixed economy with the emergence of legislation on labor and Environmental standards, affected the third phase of Indian CSR This phase is also characterized by a shift from corporate self-regulation to strict legal and public regulation of business activities.

**Phase IV (1980- Onwards)** - Indian companies and stakeholders began abandoning traditional philanthropic engagement and, to some extent, integrated CSR into a coherent and sustainable business strategy, partly adopting the multi stakeholder approach.

## OBJECTIVE OF THE STUDY

Following are the objectives for this study:

- To Study the concept of CSR
- To Study the Major areas of CSR initiatives in Indian Banking Sector





## METHODOLOGY

Research methodology is the blue print of the research which is going to be conducted. The Research design in this study is Descriptive research design, Random Sampling technique is used for selecting the Banks for this Study in which the major players two from Public Sector and two from Private Sector have been selected for the study i.e. Kotak Mahindra Bank, HDFC and ICICI. The Data is collected from secondary sources particularly from concerned Banks Annual Report, Web sites, newsletters and data from various journals.

## LITERATURE REVIEW

[Carroll, 1979; 2008, 500]: "The social responsibility of business encompasses the economic, legal, ethical and discretionary expectations that a society has of organizations at a given point in time."

The Commission defines corporate social responsibility as "the responsibility of enterprises for their impacts on society". To fully meet their social responsibility, enterprises "should have in place a process to integrate social, environmental, ethical human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders" According to Bert Scholtens, "finance relates to the sustainability of economic development and to CSR. The three financing modes open the potential to direct the economic activities in a way that takes account of social, ethical, and environmental issues".

According to Jacob M. Rose, in his study findings indicate that directors employ prospective rationality cognition, and they sometimes make decisions that emphasize legal defensibility at the expense of personal ethics and social responsibility. The results suggest that additional ethics education will have little influence on the decisions of many business leaders because their decisions are driven by corporate law, rather than personal ethics.

Paul C. Godfrey and Nile W. Hatch they studied on the two aspects one; Examination of the marginal utility of various CSRs by firms. Second, researchers must focus tools on individual firm-stakeholder their.

## CSR INITIATIVES BY BANKING SECTOR

### Period of the Study

CSR data for the years 2019-20 and 2020-21 have been analysed in this study. Data Analysis:





**Table 1: CSR Amount Spent by Selected Private Banks**

	Kotak Mahindra Bank Limited		HDFC BANK		ICICI BANK	
	2020-21	2019-20	2020-21	2019-20	2020-21	2019-20
CSR Prescribed	142.27	124.23	627.86	533.59	184.53	127.3
CSR Spent	79.4	74.62	634.91	535.31	200.5	134.35
Education	42.51	29.01	56.9	386.22	6.56	
Environment	1.57		7.37	28.64	17.48	
Healthcare	18.46	4.66	106.86	0.25	71.63	
Rural Development			402.44	70.28	48.21	53.05
Sports	14.4	10.93				
Swatch Bharat & Sanitation			2.91		1.52	
Other Welfare						2.89
Skill Development			43.65	0.12	28.2	
Social Welfare		0.02			4.94	25
Poverty & Nutrition			0.45	49.8		26
Financial Literacy					0.17	1.09
Administrative Overheads	2.48		7.84			
Impact Assessment			0.49			
Disaster Management			6		3.95	
Livelihood enhancement projects		30			17.51	26.32
Heritage					0.17	
Drinking water facilities					0.16	

**Interpretation**

Table 1 shows that ICICI Bank increased its CSR fund spending by roughly 50% from 2019-20 to 2020-21. In comparison to the previous year, HDFC Bank spent 18% more CSR funds in fiscal year 2020-21, while Kotak Mahindra Bank spent only 6% more CSR funds.

HDFC Bank spent the most money from its CSR fund in the Rural Development category, which was ranked first. Rural development is a priority for ICICI Bank, whereas education is a priority for Kotak Mahindra Bank when it comes to CSR funding.



### Conclusion

Based on the results presented above, it is possible to draw the conclusion that both private sector and public sector banks are making an effort to engage their consumers in a meaningful way through the use of CSR initiatives. The health care industry is the primary focus of the public sector banks, whereas the rural development industry is the primary focus of the private sector banks. When compared to public sector banks, private banks are spending a greater amount of money on corporate social responsibility (CSR) activities. However, public sector banks have spent more money on CSR during the year 2020-21 compared to 2019-20. It has also been observed that private sector banks spent more money

on corporate social responsibility than the amount that was prescribed for them by The Companies Act 2013. This is because private banks are required to spend 2 percent of the average net profits made during the three financial years that immediately preceded the most recent one, whereas public banks are allowed to spend only 1 percent of the net profit from the most recent year.

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**A STUDY OF FINANCIAL PERFORMANCE ANALYSIS: A CASE OF  
KSB LTD.**

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**ABSTRACT**

The study titled the financial performance analysis a company. The objective of the paper is to study the existing financial position of a company through associating the current financial performance with last three years. The data used in this study is secondary data which is collected through annual reports. The data that used in this study, comparative balance sheet, common size balance sheet, comparative balance sheet analysis. Analytical research method is used for analysis and a critical evaluation of the data. The study of financial performance on the company has revealed the great deal of their various financial aspects for four years. The comparative analysis unlocks the overall performance methodology. The company has succeeded in maintaining a reasonable profitability position.

**KEYWORDS:** Financial Performance, Comparative statement, Common size statement.

**INTRODUCTION**

Financial performance analysis is the process of identifying the financial strengths and weaknesses of the organization by properly establishing the relationship between the item of Balance Sheet and Profit and Loss Account. It also helps in short term and long term forecasting and growth can be identified with the help of financial performance analysis. The analysis of financial statement is a process of evaluating the relationship between the component parts of financial statement to obtain a better understanding of the organization position and performance. This analysis can be undertaken by management of the firms or by parties outside the namely, owners, creditors, investors.

Financial statement refers mainly three basic statements: Balance Sheet, Income Statement and Cash Flow Statement.

**LITERATURE REVIEW**

- **Sheela christina (2017)** carried out the study on Financial performance of Wheels India Limited Chennai. This study is depend upon secondary data. For this study researcher studied on last 5 years data and used financial tools like ratio analysis, comparative balance sheet, DuPoint analysis and also used statistical tools such as trend analysis and correlation. Profitability ratios indicates a decrease in the profit level, utilization of fixed assets and working capital in the last financial year. So, the company can take necessary steps to improve turnover and profit. This study shows that the financial performance is satisfactory.
- **Kanagavalli. G& Devi R.S. (2018)** a study focused on Financial Performance of selected automobile companies. The purpose of this study is to evaluate and compare the financial performance of selected companies. The financial performance





evaluated for the period of 5 years from 2013-2017 by using ratio analysis. The study found that there is the positive strong relationship of liquidity ratio. The Profitability Ratios of Hero Motocorp is higher than other automobile companies. It shows Hero Motocorp earned high profit and it is plus point for the company. After analysing all the aspects, this research shows that Bajaj Auto and TVS Motors are satisfactory but Hero Motocorp sustains a good position in the market.

- **Muthusamy. A & Karthika. S (2019)** carried out a study on financial performance of selected cement companies in India isto evaluate the liquidity and profitability of two selected cement firms, their paper on convenience sampling method was treated. The study analyses the financial performance of two major Cement companies via., Ultra Tech Cement Limited and Shree Cement Limited. Descriptive and correlation approach used as statistical instruments for this study. This study suggest that in the two companies profitability position is fulfilled, but the liquidity position is not fulfilled.
- **Andal. V & Suganya. S & and etal (2020)** the study on Financial Performance Analysis of Puma, manufacturer of sports apparels and sports equipment company. The analysis was done by using vertical and horizontal ratio, financial ratios. These analysis and ratios will help the company for the future growth and to improve the company market share. This study concludes that the company is performing well and will make profit and revenues for the coming financial years. The current ratio of PUMA has reduced and in all other contexts, the financial position of puma is satisfactory.
- **Chandrasekaran. S (2021)** Study focused on the financial performance Analysis of XI Dynamics India Private Limited. This company is providing Housing loans and mortgage loans to affordable segments. This study is to analyze the financial position, identifying the strength and weakness of the firm and also identify the difficult of the processing in mortgage. Researcher has used secondary data and various application tools to evaluate the financial performance like ratio analysis, and comparative balance sheet. And the study concluded that the company's financial performance is very good and also Company trying to generate more funds from other sources in order to expand the business.

#### OBJECTIVES OF STUDY

1. To assess a financial performance of a company through common size statement analysis
2. To know the efficiency of financial operations by using comparative statement analysis
3. To analyze the financial position of a company through cash flow statement.

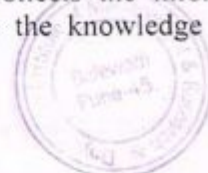
#### LIMITATIONS OF THE STUDY

The analysis is fully based on secondary data and hence the accuracy of data is the main concern.

#### RESEARCH METHODOLOGY

Research is the systematic process in which the researcher collects the information & analyses it for own understanding. Research helps to increase the knowledge about the

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particular topic. This study analyzed the Financial Performance of the company & also help to understand the financial structure and position of the KSB Limited. The financial study helps us to analysis the financial background and the utilization of the income earned.

### DATA COLLECTION

Data collection is a process of organizing the data. This study is entirely based on secondary data collected Annual financial Statements of the KSB Limited. In addition, data has been collected from published sources as well as websites, management, & research papers etc. Data collection is done for analyzing and interpreting.

The secondary data can be collected through following ways:

1. Internet
2. Books
3. Journals

### SAMPLE SIZE

Financial statements of 2018 to 2021

### TOOLS USED

1. Common size statement analysis
2. Comparative statement analysis
3. Cash flow statement

### COMMON SIZE INCOME STATEMENT ANALYSIS

Table No. 2 Common Size Income Statement

For Year March 2018 to March 2021.

(All amounts are in ₹ million, unless otherwise stated)

PARTICULARS	Mar-18		Mar-19		Mar-20		Mar-21	
	(MILLION)	%	(MILLION)	%	(MILLION)	%	(MILLION)	%
<b>INCOME</b>								
REVENUE FROM OPERATION (GROSS)	-	-	-	-	-	-	-	-
LESS: EXCISE/SERVICE TAX/ OTHER LEVIES	-	-	-	-	-	-	-	-
REVENUE FROM OPERATION	10930.66	100	12939.08	100	12081.15	100	14972.91	100





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(NET)								
<b>TOTAL OPERATING REVENUES</b>	10930.66	100	12939.08	100	12081.15	100	14972.91	100
OTHER INCOME	267.1	2.4	256.31	1.98	322.99	2.67	363.77	2.42
<b>TOTAL REVENUE</b>	11197.76	102	13195.39	102	12404.14	103	15336.68	102
<b><u>EXPENSES</u></b>								
COST OF MATERIAL CONSUMED	5203.55	48	6015.78	46.5	5512.66	45.6	7212.55	48.2
OPERATING AND DIRECT EXPENSES	0	0	0	0	0	0	0	0
PURCHASE OF STOCK IN TRADE	783.68	7.17	1062.39	8.21	970.63	8.03	1353.31	9
CHANGES IN INVENTORIES OF FG, WIP & STOCK IN TRADE	-336.54	-3.08	-95.11	-0.74	-278.11	-2.3	-641.61	-4.3
EMPLOYEE BENEFIT EXPENSES	1539.66	14.09	1778.89	13.75	1862.43	15.42	2153.75	14
FINANCE COST	37.49	0.34	53.12	0.41	33.94	0.28	50.4	0.3
DEPRECIATION AND AMORTIZATION EXPENSES	396.67	3.63	457.23	3.53	417.7	3.46	435.34	2.9
OTHER EXPENSES	2456.52	22.47	2674.7	20.67	2335.55	19.33	2800.15	19
<b>TOTAL EXPENSES</b>	10081.03	92.22	11947	92.33	10854.8	89.85	13363.89	89
<b>PROFIT/LOSS BEFORE</b>								

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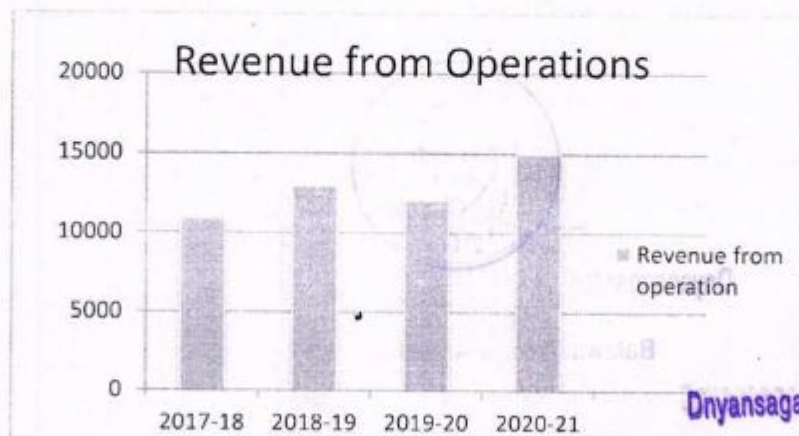




EXCEPTIONAL, EXTRAORDINARY ITEMS AND TAX	1116.73	10.22	1248.39	9.65	1549.34	12.82	1972.79	13
EXCEPTIONAL ITEMS	0	0	127.42	0.98	0	0	0	0
PROFIT /LOSS BEFORE TAX	1116.73	10.22	1375.81	10.63	1549.34	12.82	1972.79	13
TAX FOR EARLIER YEARS	0	0	0	0	0	0	0	0
TAX SETTLEMENT RELATING TO PREVIOUS YEAR.	0	0	0	0	190.38	1.58	0	0
TOTAL TAX EXPENSES	376.47	3.44	397.56	3.07	575.96	4.77	506.77	3.38
PROFIT/LOSS AFTER TAX AND BEFORE EXTRAORDINARY ITEMS	740.26	6.77	978.25	7.56	973.38	8.06	1466.02	9.79

CHART NO 1:- REVENUE FROM OPERATION IN MILLION

PARTICULARS	2017-2018	2018-2019	2019-2020	2020-2021
REVENUE FROM OPERATIONS	10930.66	12939.08	12081.15	14972.91



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**COMMON SIZE INCOME STATEMENT  
FOR YEAR MARCH 2018 TO MARCH 2021.**

**INTERPRETATION**

- Revenue from operations are fluctuating.
- In expenses cost of material consumed is increased from the year 2018 to 2021 from 5203.55 to 7212.55. In the year 2020 it declines 5512.66 and in the year 2021 it again increased 7212.55 with the percentage 48.17.
- Employee benefit expenses increased gradually from the year 2018 to 2021 that is, 1539.66 to 2153.75. Finance costs are fluctuating.
- Overall the KSB Limited Company is performing well in the market from 2018 to 2021.

**COMMON SIZE BALANCE SHEET STATEMENT ANALYSIS**

Table No.3 Common Size Balance Sheet Statement

For Year March 2018 To March 2021.

(All amounts are in ₹ million, unless otherwise stated)

Particulars	31.03.2018		31.03.2019		31.03.2020		31.03.2021	
	Amount (Million)	%	Amount (Million)	%	Amount (Million)	%	Amount (Million)	%
<b>Equity &amp; Liability</b>								
<b>Shareholder's Funds</b>								
Share capital	348.08	2.9	348.08	2.5	348.08	2.31	348.08	2.23
Other Equity	6784.47	56	7459.06	54	8116.24	54.3	9292.78	59.5
<b>I. Non-current Liabilities</b>								
Lease liabilities	0	0	0	0	8.98	0.1	20.34	0.13
Provisions	365.79	3	424.4	3.1	453.51	3.03	516.67	3.31
Total non-current liabilities	365.79	3	424.4	3.1	462.49	3.09	537.01	3.44
<b>II. Current Liabilities</b>								
<b>Financial liabilities-</b>								
(a) Borrowings	434.26	3.6	600	4.3	600	4.01	0	0
(b) Lease liabilities	0	0	0	0	6.76	0.05	9.55	0.06





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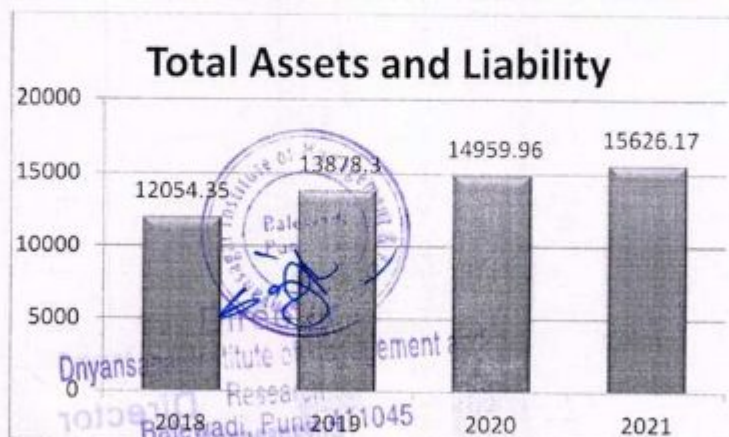
(c) Trade payables									
- Total outstanding dues of micro enterprises and small enterprises	21.3	0.2	12.24	0.1	24.78	0.17	212.05	1.36	
- Total outstanding dues of creditors other than micro enterprises and small enterprises	2155.73	18	2410.56	17	2602.78	17.4	2579.45	16.5	
			2543.05	18					
Other current liabilities	971.34	8.06	1432.17	10.3	1453.74	9.72	1261.71	8.07	
			1323.26	9.53					
Provisions	412.02	3.42	466.35	3.36	493.32	3.3	540.75	3.46	
			451.62	3.25					
Current tax liabilities (net)	15.19	0.13	13.37	0.1	184.38	1.23	17.64	0.11	
Total current liabilities	4556.01	37.8	5646.76	40.7	6033.15	40.3	5448.3	305	
Total Liabilities	4921.8	40.8	6071.16	43.8	6495.64	43.4	5985.31	38.3	
<b>Total Equity and Liabilities</b>	<b>12054.35</b>	<b>100</b>	<b>13878.3</b>	<b>100</b>	<b>14959.96</b>	<b>100</b>	<b>15626.17</b>	<b>100</b>	
<b>I. Non-Current Assets</b>									
Fixed Assets-Property, plant and equipment	3191.94	26.5	3056.74	22	2907.53	19.4	2819.53	18	
Right-of-use assets	0	0	0	0	262.92	1.76	273.43	1.75	
Capital Work-In-Progress	41.38	0.34	344.9	2.49	251	1.68	391.76	2.51	
Other Intangible asset	18.66	0.15	16.11	0.12	13.71	0.09	13.41	0.09	
Non-Current Investments	63.15	0.52	63.15	0.46	63.15	0.42	63.15	0.4	
Trade receivables	99.34	0.82	130.89	0.94	166.41	1.11	145.36	0.93	
Loans	67.87	0.56	80.97	0.58	81.27	0.54	122.27	0.78	
Deferred tax	161.37	1.34	119.24	0.86	168.14	1.12	219.72	1.41	





assets									
Assets for current tax (net)	141.49	1.17	155.48	1.12	125.64	0.84	160.98	1.03	
Other Non-Current Assets	210.96	1.75	40.57	0.29	8.07	0.05	214.59	1.37	
Total non-current assets	3996.16	33.2	4008.05	28.9	4047.84	27.1	4424.2	28.3	
<b>II. Current Assets</b>									
Inventories	3030.23	25	3248.43	23	3608.75	24	4230.84	27.1	
Financial assets- (a) Trade Receivables	2907.15	24	2961.79	21	2667.59	18	2779.83	17.8	
(b) Cash And Cash Equivalents	119.81	1	483.51	3.5	870.34	5.8	565.39	3.62	
(c) Bank balances other than (b) above	1262.58	10	2416.5	17	3162.83	21	2979.65	19.1	
(d) Loans	11.98	0.1	21.55	0.2	18.73	0.1	27.08	0.17	
(e) Other financial assets	48.1	0.4	105.63	0.8	102.85	0.7	101.24	0.65	
Other Current Assets	678.34	5.6	632.84	4.6	481.03	3.2	517.94	3.31	
Total Current Assets	8058.19	67	9870.25	71	10912.12	73	11201.97	71.7	
<b>Total Assets</b>	<b>12054.35</b>	<b>100</b>	<b>13878.3</b>	<b>100</b>	<b>14959.96</b>	<b>100</b>	<b>15626.17</b>	<b>100</b>	

CHART NO 2:- TOTAL ASSETS AND LIABILITIES IN MILLION







**INTERPRETATION**

- Share capital is constant.
- Current liabilities from 2018 to 2020 was increased from 4556.01million to 6033.15 million but in 2022 it's decreased up to 5448.3 million.
- A total current asset was increase year by year therefore working capital is also increase.

**COMPARATIVE BALANCE SHEET STATEMENT ANALYSIS**

Table No. 4 Comparative Balance Sheet Statement

For Year March 2021 And March 2020.

(All amounts are in ₹ million, unless otherwise stated)

PARTICULAR	31.03.2020 (P.Y)	31.03.2021 (C.Y)	ABSOLUTE CHANGE(C- P)	% CHANGE (A.C/P*100)
<b>Equity &amp; Liability</b>				
<b>Shareholder's Funds</b>				
Share capital	348.08	348.08	-	-
Other Equity	8116.24	9292.78	1176.54	14.5
<b>I. Non-current Liabilities</b>				
Lease liabilities	8.98	20.34	11.36	127
Provisions	453.51	516.67	63.16	13.93
Total non-current liabilities	462.49	537.01	74.52	16.11
<b>II. Current Liabilities</b>				
<b>Financial liabilities-</b>				
(a) Borrowings	600	0	-600	-100
(b) Lease liabilities	6.76	9.55	2.79	41.27
(c) Trade payables				
- Total outstanding dues of micro enterprises and small enterprises	24.78	212.05	187.27	756
- Total outstanding dues of creditors other than micro enterprises and small enterprises.	2602.78	2579.45	-23.33	-0.9
Other current liabilities	1453.74	1261.71	-192.03	-13.21
Provisions	493.32	540.75	47.43	9.61
Current tax liabilities (net)	184.38	17.64	-166.74	-90.43
Total current liabilities	6033.15	5448.3	-584.85	-9.69
Total Liabilities	6495.64	5985.31	-510.33	-7.86
<b>Total Equity and Liabilities</b>	<b>14959.96</b>	<b>15626.17</b>	<b>666.21</b>	<b>-4.45</b>
<b>I. Non-Current Assets</b>				

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Fixed Assets-Property, plant and equipment	2907.53	2819.53	-88	-3.03
Right-of-use assets	262.92	273.43	10.51	4
Capital Work-In -Progress	251	391.76	140.76	56.08
Other Intangible asset	13.71	13.41	-0.3	-2.19
Non-Current Investments	63.15	63.15	-	-
Trade receivables	166.41	145.36	-21.05	-12.65
Loans	81.27	122.27	41	50.45
Deferred tax assets	168.14	219.72	51.58	30.68
Assets for current tax (net)	125.64	160.98	35.34	28.13
Other Non-Current Assets	8.07	214.59	206.52	256
Total non-current assets	4047.84	4424.2	376.36	9.3
<b>II. Current Assets</b>				
Inventories	3608.75	4230.84	622.09	17.24
Financial assets-(a) Trade Receivables	2667.59	2779.83	112.24	4.21
(b) Cash And Cash Equivalents	870.34	565.39	-304.95	-35.04
(c) Bank balances other than (b) above	3162.83	2979.65	-183.18	-5.79
(d) Loans	18.73	27.08	8.35	44.58
(e) Other financial assets	102.85	101.24	-1.61	-1.57
Other Current Assets	481.03	517.94	36.91	7.67
Total Current Assets	10912.12	11201.97	289.85	2.66
<b>Total Assets</b>	<b>14959.96</b>	<b>15626.17</b>	<b>666.21</b>	<b>4.45</b>
Trade receivables	166.41	145.36	-21.05	-12.65
Loans	81.27	122.27	41	50.45
Deferred tax assets	168.14	219.72	51.58	30.68
Assets for current tax (net)	125.64	160.98	35.34	28.13
Other Non-Current Assets	8.07	214.59	206.52	256
Total non-current assets	4047.84	4424.2	376.36	9.3
<b>II. Current Assets</b>				
Inventories	3608.75	4230.84	622.09	17.24
Financial assets-(a) Trade Receivables	2667.59	2779.83	112.24	4.21
(b) Cash And Cash Equivalents	870.34	565.39	-304.95	-35.04
(c) Bank balances other than (b) above	3162.83	2979.65	-183.18	-5.79
(d) Loans	18.73	27.08	8.35	44.58
(e) Other financial assets	102.85	101.24	-1.61	-1.57
Other Current Assets	481.03	517.94	36.91	7.67
Total Current Assets	10912.12	11201.97	289.85	2.66
<b>Total Assets</b>	<b>14959.96</b>	<b>15626.17</b>	<b>666.21</b>	<b>4.45</b>





**INTERPRETATION**

- The overall financial position of the company for the year (2020-2021) was satisfactory.

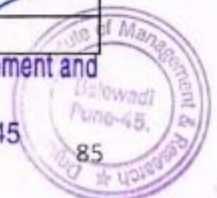
Table No.5 Comparative Balance Sheet Statement

For Year March 2020 And March 2019.

(All amounts are in ₹ million, unless otherwise stated)

PARTICULAR	31.03.2019 (P.Y)	31.03.2020 (C.Y)	ABSOLUTE CHANGE(C- P)	% CHANGE (A.C/P*100)
<b>Equity &amp; Liability</b>				
<b>Shareholder's Funds</b>				
Share capital	348.08	348.08	-	-
Other Equity	7459.06	8116.24	657.18	8.81
<b>I. Non-current Liabilities</b>				
Lease liabilities	0	8.98	8.98	0
Provisions	424.4	453.51	29.11	6.85
Total non-current liabilities	424.4	462.49	38.09	8.97
<b>II. Current Liabilities</b>				
<b>Financial liabilities-</b>				
(a) Borrowings	600	600	0	0
(b) Lease liabilities	0	6.76	6.76	0
(c) Trade payables - Total outstanding dues of micro enterprises and small enterprises - Total outstanding dues of creditors other than micro enterprises and small enterprises.	12.24 2410.56	24.78 2602.78	12.54 192.22	102.45 7.97
	2543.05		59.73	2.34
Other current liabilities	1432.17 1323.26	1453.74	21.57 130.48	1.5 9.86
Provisions	466.35 451.62	493.32	26.97 41.7	5.78 9.23
Current tax liabilities (net)	13.37	184.38	171.01	1279.05
Total current liabilities	5646.76	6033.15	386.39	6.84
Total Liabilities	6071.16	6495.64	424.48	6.99
<b>Total Equity and Liabilities</b>	<b>13878.3</b>	<b>14959.96</b>	<b>1081.66</b>	<b>7.79</b>
<b>I. Non-Current Assets</b>				
Fixed Assets-Property, plant and equipment	3056.74	2907.53	-149.21	-4.88
Right-of-use assets	0	262.92	262.92	

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Capital Work-In-Progress	344.9	251	-93.9	-27.22
Other Intangible asset	16.11	13.71	-2.4	-14.89
Non-Current Investments	63.15	63.15	0	0
Trade receivables	130.89	166.41	35.52	27.13
Loans	80.97	81.27	0.3	0.37
Deferred tax assets	119.24	168.14	48.9	41
Assets for current tax (net)	155.48	125.64	-29.84	-19.19
Other Non-Current Assets	40.57	8.07	-32.5	-80.1
Total non-current assets	4008.05	4047.84	39.79	0.99
<b>II. Current Assets</b>				
Inventories	3248.43	3608.75	360.32	11.09
Financial assets-(a) Trade Receivables	2961.79	2667.59	-294.2	-9.93
(b) Cash And Cash Equivalents	483.51	870.34	386.83	80
(c) Bank balances other than (b) above	2416.5	3162.83	746.33	30.88
(d) Loans	21.55	18.73	-2.82	-13.08
(e) Other financial assets	105.63	102.85	-2.78	-2.63
Other Current Assets	632.84	481.03	-151.81	-23.98
Total Current Assets	9870.25	10912.12	1041.87	10.55
<b>Total Assets</b>	<b>13878.3</b>	<b>14959.96</b>	<b>1081.66</b>	<b>7.79</b>

### INTERPRETATION

- The comparative balance sheet of the company reveals during 2020, that there has been a decrease in the fixed assets of Rs.149.21 million which indicates sale of fixed assets. Other non-current assets, other current assets and other financial assets were decrease.

Table No.6 Comparative Balance Sheet Statement

For Year March 2019 And March 2018.

(All amounts are in ₹ million, unless otherwise stated)

PARTICULAR	31.03.2018 (P.Y)	31.03.2019 (C.Y)	ABSOLUTE CHANGE(C-P)	% CHANGE (A.C/P*100)
<b>Equity &amp; Liability</b>				
<b>Shareholder's Funds</b>				
Share capital	348.08	348.08	0	0
Other Equity	6784.47	7459.06	674.59	9.94
<b>I. Non-current Liabilities</b>				
Lease liabilities	0	0	0	0
Provisions	365.79	424.4	58.61	16.02
Total non-current liabilities	365.79	424.4	58.61	16.02
<b>II. Current Liabilities</b>				





<b>Financial liabilities-</b>				
(a) Borrowings	434.26	600	165.74	38.17
(b) Lease liabilities	0	0	0	0
(c) Trade payables	21.3	12.24	-9.06	-42.54
- Total outstanding dues of micro enterprises and small enterprises				
- Total outstanding dues of creditors other than micro enterprises and small enterprises.	2155.73	2410.56	254.83	11.82
		2543.05	387.32	17.97
Other current liabilities	971.34	1432.17	460.83	47.44
		1323.26	351.92	36.23
Provisions	412.02	466.35	54.33	13.19
		451.62	39.6	9.61
Current tax liabilities (net)	15.19	13.37	-1.82	-11.98
Total current liabilities	4556.01	5646.76	1090.75	23.94
Total Liabilities	4921.8	6071.16	1149.36	23.35
<b>Total Equity and Liabilities</b>	<b>12054.35</b>	<b>13878.3</b>	<b>1823.95</b>	<b>15.13</b>
<b>I. Non-Current Assets</b>				
Fixed Assets-Property, plant and equipment	3191.94	3056.74	-135.2	-4.24
Right-of-use assets	0	0	0	0
Capital Work-In-Progress	41.38	344.9	303.52	733
Other Intangible asset	18.66	16.11	-2.55	-13.67
Non-Current Investments	63.15	63.15	0	0
Trade receivables	99.34	130.89	31.55	31.76
Loans	67.87	80.97	13.1	19.3
Deferred tax assets	161.37	119.24	-42.13	-26.11
Assets for current tax (net)	141.49	155.48	13.99	9.89
Other Non-Current Assets	210.96	40.57	-170.39	-81
Total non-current assets	3996.16	4008.05	11.89	0.3
<b>II. Current Assets</b>				
Inventories	3030.23	3248.43	218.2	7.2
Financial assets-(a) Trade Receivables	2907.15	2961.79	54.64	1.88
(b) Cash And Cash Equivalents	119.81	483.51	363.7	304
(c) Bank balances other than (b) above	1262.58	2416.5	1153.92	91.39
(d) Loans	11.98	21.55	9.57	79.88
(e) Other financial assets	48.1	105.63	57.53	119
Other Current Assets	678.34	632.84	-45.5	-6.71







Total Current Assets	8058.19	9870.25	1812.06	22.49
<b>Total Assets</b>	<b>12054.35</b>	<b>13878.3</b>	<b>1823.95</b>	<b>15.13</b>

### INTERPRETATION

- The comparative balance sheet of the company reveals during 2018-19, that there has been a decrease in the fixed assets of Rs.149.21 million which indicates sale of fixed assets. Other non-current assets, other current assets and other financial assets were decrease.

### CASH FLOW STATEMENT ANALYSIS

Table No.7 Cash Flow Statement

For Year March 2021 And March 2020.

PARTICULAR	AS AT 31.03.2021 (MILLION)	AS AT 31.03.2020 (MILLION)
Cash flows from operating activities		
Profit before tax	1,972.79	1,549.34
Adjustments for :		
Depreciation and amortization expense	435.34	417.70
Net loss on disposal of property, plant and equipment	3.69	8.40
Finance costs	50.40	33.94
Interest income	(195.76)	(192.72)
Dividend from investment in associate	(26.83)	(32.71)
Fair value (gain) / loss in derivative financial instruments	5.64	(8.20)
Sundry credit balances and provisions no longer required, written back	(3.77)	(21.05)
Unrealised foreign exchange (gain) / loss	(11.92)	3.77
Allowance for doubtful receivables	<u>30.86</u>	<u>91.91</u>
	<u>287.65</u>	<u>301.04</u>
Operating profit before working capital changes	2,260.44	1,850.38
Adjustment for changes in working capital: (Increase) / decrease in operating assets:		
Inventories	(622.09)	(360.32)
Trade receivables	(103.69)	178.06
Loans	(49.35)	2.52
Other assets	(256.26)	159.75
Increase / (decrease) in operating liabilities:		
Trade payables	183.61	215.13
Other financial liabilities	47.76	53.25
Other liabilities	(192.03)	21.57
Provisions	<u>119.13</u>	<u>5.65</u>
	<u>(872.92)</u>	<u>275.61</u>





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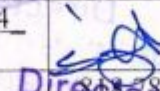
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Cash generated from operations		1,387.52	2,125.99
Income taxes paid		(762.58)	(411.32)
Net cash flows generated from operating activities (A)		624.94	1,714.67

Table No.8 Cash Flow Statement

For Year March 2019 And March 2018.

PARTICULAR	AS AT 31.03.2019 (MILLION)	AS AT 31.03.2018 (MILLION)
Cash flows from operating activities		
Profit before tax	1,375.81	1,116.73
Adjustments for :		
Depreciation and amortization expense	457.23	396.67
Net gain on disposal of property, plant and equipment [Refer note (ii) below]	(128.02)	(4.85)
Finance costs	53.12	37.49
Interest income	(128.60)	(95.15)
Dividend from investment in associate	(21.68)	(26.09)
Dividend from investment in subsidiary	(3.30)	(43.00)
Mark to market (gain) / loss on derivative contracts	9.60	(5.13)
Sundry credit balances and provisions no longer required, written back	(29.59)	(60.90)
Unrealised exchange (gain) / loss	(21.09)	9.51
Allowance for doubtful receivables	(7.26)	(9.00)
	<u>180.41</u>	<u>199.55</u>
Operating profit before working capital changes	1,556.22	1,316.28
Adjustment for changes in working capital: (Increase) / decrease in operating assets:		
Inventories	(218.20)	(553.86)
Trade receivables	(56.94)	(385.57)
Loans	(22.67)	4.29
Other assets	226.32	(115.54)
Increase / (decrease) in operating liabilities:		
Trade payables	404.99	456.80
Other financial liabilities	105.61	75.50
Other liabilities	351.73	458.34
Provisions	27.94	(71.55)
		<u>(131.59)</u>

  
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Cash generated from operations	2,375.00	1184.69
Income taxes paid	(353.53)	(408.90)
Net cash flows generated from operating activities (A)	2,021.47	775.79

**INTERPRETATION**

- From the above table no.7 cash flow from the operating activities is Rs. 1,972.79 Million from the year 2021 and 2020 is Rs. 1,549.34 that means operating activities are increase from previous year.
- Table no.8 cash flow from the operating activities is Rs. 1375.81 Million from the year 2019 and 2018 is Rs.1116.73 that means operating activities are decrease from previous year.

**CHART NO 3:- NET CASH FLOW FROM OPERATING ACTIVITIES**

Net cash flow from operating activities	2018	2019	2020	2021
Values (Million)	1116.73	1375.81	1549.34	1972.79

**FINDINGS**

Findings of the project are summed up as follows:

- Share capital is constant, but the company's revenue from operations was fluctuating.
- In expenses cost of material consumed and finance costs are fluctuating were fluctuating.
- Employee benefit expenses increased gradually from the year 2018 to 2021 that is, 1539.66 to 2153.75.
- Overall the KSB Limited Company is performing well in the market from 2018 to 2021.
- Company's working capital is increased. Current liabilities was increased every year except 2022 and total current assets were also increase every year.





- The overall financial position of the company for the year (2020-2021) was satisfactory.

### CONCLUSION

On the basis of various techniques applied for the financial analysis of KSB Limited we can arrive at a conclusion that the financial position and overall performance of the company is satisfactory. Though the income of the company has increased over the period but not in the same pace as of expenses.

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## Effectiveness of You Tube advertisement in purchase decision

**Shamli A Joshi and Bhagyashree A Joshi**

### Abstract

As the world is moving towards digitalization, brands have also evolved with time, in terms of their marketing strategies. YouTube is a very common & extensively used platform for well established brands to market their product. A lot of deliberation has been done on the question, i.e., do these advertisements actually drive sales / drives customer to purchase the product, or does it simply create awareness about the product & the brands. YouTube is the second most visited website globally, after Google search. This gives a concrete platform for brands to showcase their products & reach out to a large number of audiences.

This research aims to study the effectiveness of these advertisements in driving customers towards purchase decision. Various factors such as the content, audio / visual, performing artist, product information etc is taken into consideration while measuring the effectiveness of YouTube ads. This research will be beneficial for brands in understanding whether YouTube platform is an appropriate mode of marketing their product or not, given their objective is to increase sales.

**Keywords:** Effectiveness, purchase decision, You Tube advertisement

### Introduction

**Table 1:** About YouTube Advertisement

	Skippable in-stream	In-feed	Non-skippable in-stream	Bumper	Outstream
Selling point:	Users can skip so you are only charged for views	Shows to highly engaged users in the discovery and searching phase	Users can't skip so they view your whole message	Quick message that can't be skipped to raise awareness or reinforce other ads.	Raise awareness to users outside of Google when they are browsing their favorite sites
Where does it serve?	YouTube videos, GVP	You Tube Home feed, YouTube Search	YouTube videos, GVP	YouTube videos, GVP	GVP
Max video length?	No max length (less than 3 mins recommended)	No max length	15-20 seconds	6 seconds	No max length
Views reported in Google Ads?	Yes	Yes	No	No	Yes
Can increment public view count?	Yes (videos less than 10 seconds will not)	Yes	No	No	Yes
Can remarket to viewers?	Yes	Yes	No	No	Yes

\*Source: YouTube Help (<https://support.google.com/youtube/answer/2315464?hl=en>)

### Objectives

- 1) To understand effectiveness of ads on the basis of Content, Audio/visuals, performing artists, product information.
- 2) To identify if customers were persuaded to buy the product or not.

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Table 2: Literature Review

Sr. No	Title of Paper	Name of Author	Remark
1	Evaluating The Effect of YouTube Advertising towards Young Customers' Purchase Intention	Dhiyaa Nadhifa Aziza, Rifelley Dewi Astui (Indonesia)	Age group – 18 to 29 to analyze the factors of YouTube advertising (e.g. entertainment, informativeness, customization, and irritation) and their impact on perceived YouTube advertising value; and to evaluate the effect of YouTube advertising towards customers' purchase intention.
2	Effectiveness of YouTube advertisement among viewers in Chennai City	N Sukanya, S. Subbulakshmi	This study suggests that most watched videos should be chosen for giving ads so that numerous viewers watch the advertisement effectively.
3	Millennials' attention and retention to YouTube advertisements in Nigeria	Evaristus Adesina, Mowaninuoluwa Owoye, Babatunde Adeyeye, Yartey Darlynton, Stella Aririguzoh, Thelma Ekanem	This study seeks to find out the millennials' attention and retention towards advertisements on the YouTube platform and how advertisers utilize this knowledge to effectively influence the purchase decision of the millennials. The study is anchored on the Individual Differences Theory.
4	YouTube advertising value and its effects on purchase intention	Duyug Firat	Age group – 18 to 29. Study focuses particularly on intension of purchase & not the decision of purchase.
5	Creating Brand Awareness Through YouTube Advertisement Engagement	Arman Hj. Ahmad, Izian Idris, Jian Xiang Wong	Aims to investigate & examine the relationship & importance of consumer engagement in YouTube advertisement toward consumer's brand awareness
6	The Persuasive Power in Virtual Reality Advertising on YouTube	Achini Ranaweera	Usage of virtual reality in youtube advertisement.
7	TV vs. YouTube: TV Advertisements Capture More Visual Attention. Create More Positive Emotions and Have a Stronger Impact on Implicit Long-Term Memory		A comparative study between TV ads & Youtube ads its impact on the audience memory.
8	A study on consumer attitude towards youtube advertisement	Dharah Mevada* Dr. Haresh B Vaishnani**	Consumers are influenced more with ads have entertaining content.

Table 3: Research Methodology

Parameter	Methodology
Type of Research	Descriptive Research
Sampling Type	Probability sampling
Sampling Method	Simple random sampling
Population	Infinite
Sample Size	384
Method of data collection – Primary Data	Structured questionnaire
Secondary Data	YouTube Web

Table 4: Data Analysis & Interpretation

1. Age

Age	Respondents	Percentage
21-30	171	45%
31-40	122	32%
41-50	66	17%
50+	25	6%
Total	384	100%

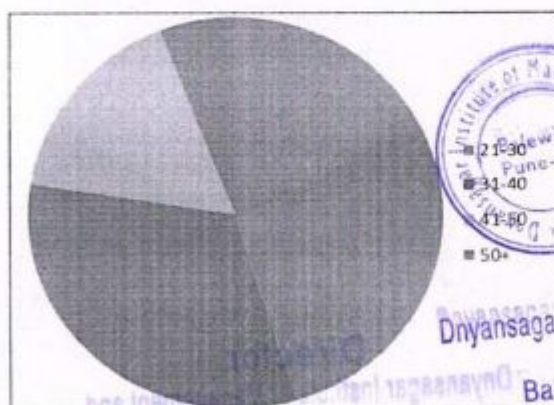


Fig 1: Age

The age groups of 21 to 30 & 31 to 40 are more active in terms of YouTube streaming, as compared to 41 & above. Usage of television is common in every house hold, especially for people aged 40 & above.

Table 5: Awareness about types of YouTube Advertisement

Type of advertisement	Respondents	Percentage
Skippable in-stream	384	100%
In-Feed	290	22%
Non Skippable in stream	384	100%
Bumper	144	29%
Outstream	100	8%

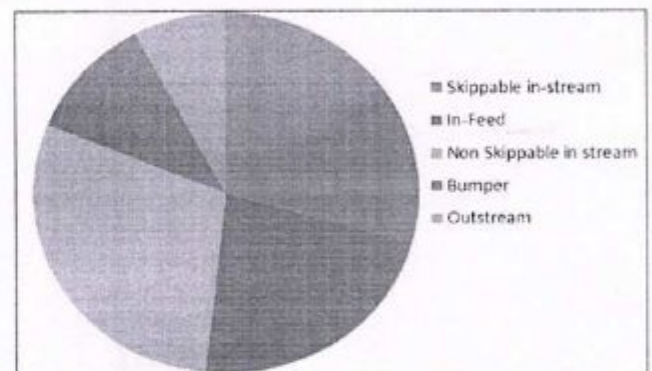


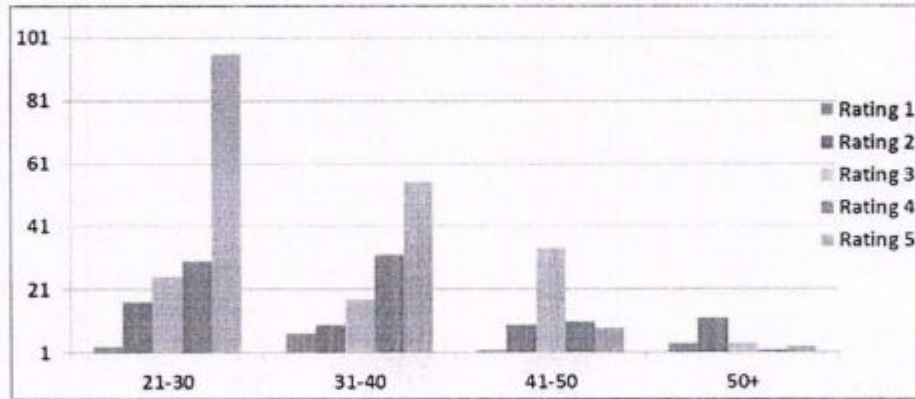
Fig 2: Types of YouTube advertisement

All respondents are aware & familiar with the Skippable & non-Skippable ads. There is a comparatively less number of respondents having awareness about the 'in-feed' advertisement which is shown to highly engaged users, Bumper quick messages which cannot be skipped & 'Outstream' ads shown to users outside Google when they are browsing their favourite sites.



**Table 6:** Rating of the advertisement on the basis of content or script

Age of Respondents	Rating 1	Rating 2	Rating 3	Rating 4	Rating 5	Total No of Respondents
21 – 30	3	17	25	30	96	171
31- 40	7	10	18	32	55	122
41- 50	2	10	34	11	9	66
50+	4	12	4	2	3	25
Total	16	49	81	75	163	384



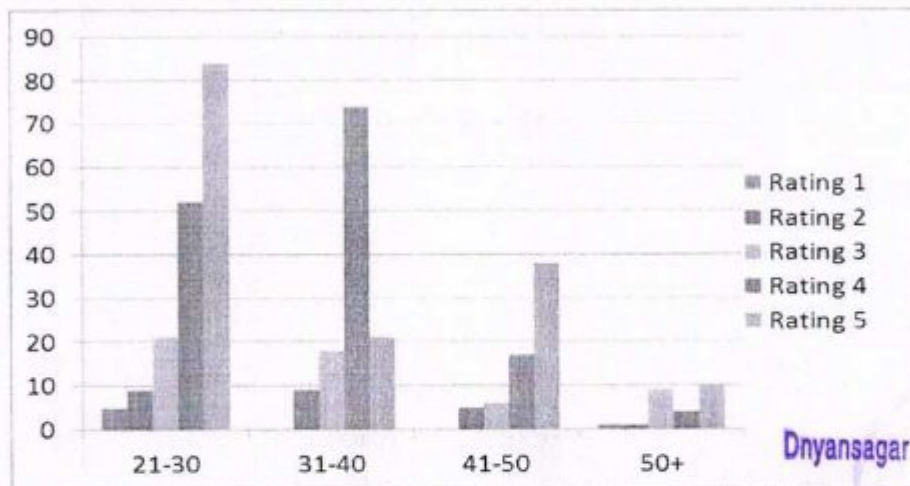
**Fig 3:** Rating 5 being the highest and Rating 1 being the lowest

The content, script and dialogues form the foundation of any advertisement. It is a direct representation of the brands image, reflection of their ideologies & perception about the public. The content being used today is more 'Youth

Centric' and curated as per the latest concepts which are currently trending among the younger generation. As per the survey, maximum rating received for content & script is from age group 21 -30, followed by second highest rating from age group 31-40.

**Table 7:** Rating of the advertisement on the basis of audio & visuals

Age of Respondents	Rating 1	Rating 2	Rating 3	Rating 4	Rating 5	Total No of Respondents
21 – 30	5	9	21	52	84	171
31- 40	0	9	18	74	21	122
41- 50	0	5	6	17	38	66
50+	1	1	9	4	10	25
Total	6	24	54	147	153	384



**Fig 4:** Rating 5 being the highest and Rating 1 being the lowest

Brain receives maximum information through the sense of hearing / listening, along with the sense of vision, or looking / seeing. The sense of sound & vision processes information faster than any other sensory organ. Advertisements consist of music or sound along with various graphic, videos

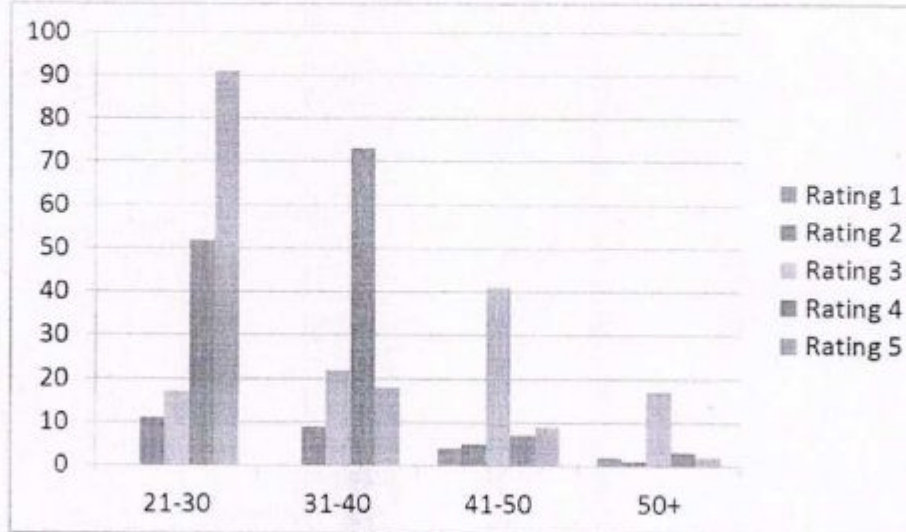
generated through AI or high definition films of actual products. Perfect combinations of audio & visual makes product look more appealing, than it is in reality. Maximum rating has been received from all age groups for these factors. Age group 31-40 has given second highest rating.





**Table 8: Rating of the ads on the basis of performing artist / influencer**

Age of Respondents	Rating 1	Rating 2	Rating 3	Rating 4	Rating 5	Total No of Respondents
21 - 30	0	11	17	52	91	171
31- 40	0	9	22	73	18	122
41- 50	4	5	41	7	9	66
50+	2	1	17	3	2	25
TOTAL	6	26	91	135	120	384



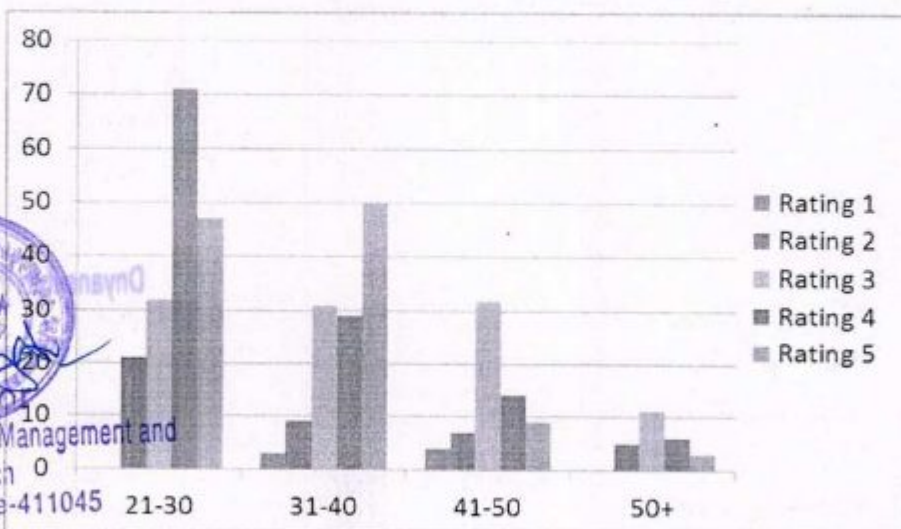
**Fig 5: Rating 5 being the highest and Rating 1 being the lowest**

Face of the brand, known as 'Brand Ambassador' feature in the advertisements as a representation. While some companies keep only one face of their brand, some companies choose to change the artists / influencer for every campaign.

These influencers play a major role in changing viewer's perception of the brand & it also ensures that the viewers keep watching the ads without skipping it. Thus, performing artists or influencers play a major role in advertisement campaigns. As per above table, respondents gave highest 4 rating in this category.

**Table 9: Rating of the ads on the basis of product information**

Age of Respondents	Rating 1	Rating 2	Rating 3	Rating 4	Rating 5	Total No of Respondents
21 - 30	0	21	32	71	47	171
31- 40	3	9	31	29	50	122
41- 50	4	7	32	14	9	66
50+	0	5	11	6	3	25
TOTAL	7	42	106	120	109	384



**Fig 6: Rating 5 being the highest and Rating 1 being the lowest**

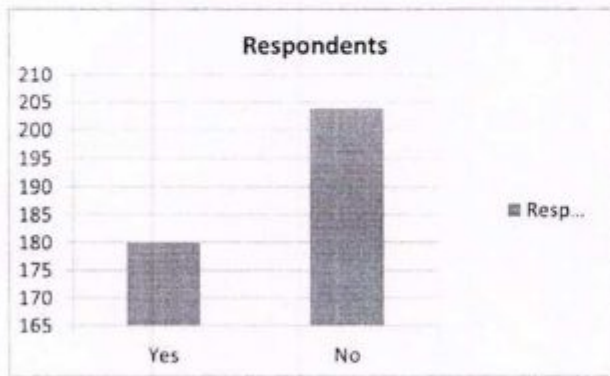
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 Director



Literate consumers are concerned about the product information, as they purchase products only after complete understanding about its contents, specification etc. Advertisements highlight 3 or 4 important pieces of information which can gain the customers interest.

**Table 10:** As a viewer, did it persuade you to purchase the product displayed in the advertisement

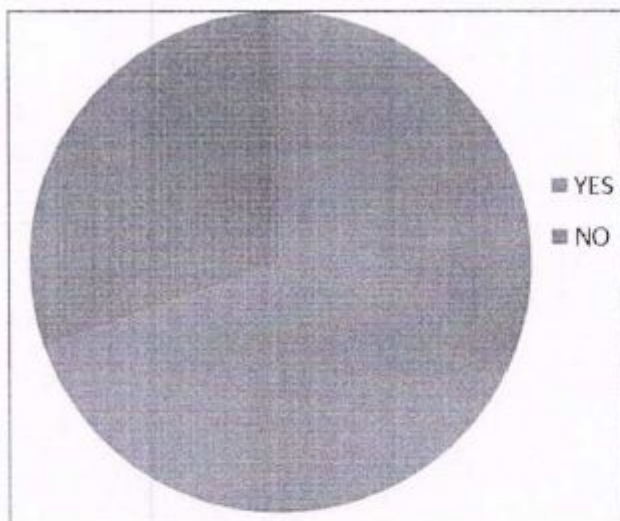
Response	No of Respondents	Percentage
Yes	180	49%
No	204	51%
Total	384	100%



**Fig 7:** Persuasion to purchase the product, main agenda of advertisement, was fulfilled. As per the survey, 49% consumers responded on a positive note.

**Table 11:** As a consumer, did the advertisement influence or change your opinion about the brand/product shown in the advertisement.

Response	No of Respondents	Percentage
Yes	267	70%
No	117	30%
Total	384	100%



**Fig 8:** Influence on opinion

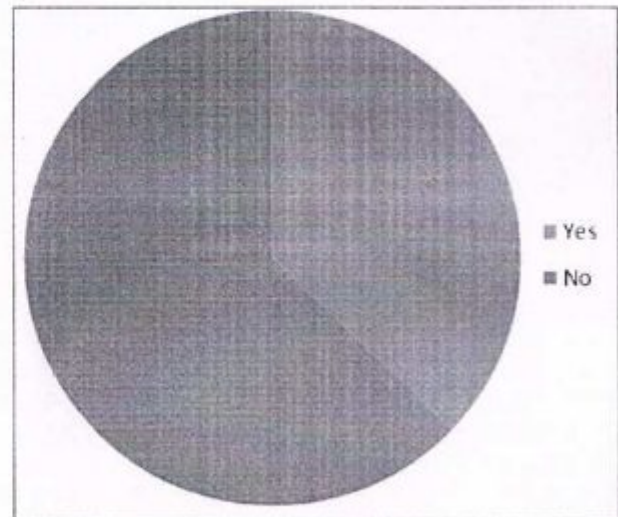
Influence' (The capacity to have an effect on the character, development, or behaviour of someone or something, or the effect itself.)

Today, any content that is posted on the internet consists of psychological triggers in various forms, which may slightly change the perception or opinion about the brand in the viewer's mind. 70% admitted that their opinions changes,

whereas, 30% people showed no impact of the advertisement on their opinions.

**Table 12:** As a consumer, do you spontaneously respond to the discounts or offers mentioned in the advertisement

Response	No of Respondents	Percentage
Yes	143	36%
No	241	64%
Total	384	100%



**Fig 9:** Response

Advertisements not only provide information about the product, but also announce various offers or discounts which may be valid only for a certain period of time. 37% respondents react spontaneously after viewing the discount offers, whereas 63% people do not react, irrespective of offers or discounts.

**Table 13:** Does the advertisement add any value to your shopping experience, or are they referred only for entertainment purpose

Response	No of Respondents	Percentage
Value Addition	312	82%
Entertainment	72	18%
Total	384	100%



**Fig 10:** Advertisement outcome

Advertisements generally serve either as an entertainment video or it adds value in product information / awareness. 81% respondents experienced that advertisements do add



value to their information, whereas 19% respondents felt that advertisements serve merely as entertainment.

### Findings

- YouTube being the second most browsed website across the world, has provided a global platform for brands to reach out to maximum customers.
- The Age groups of 21-40 are consumers of today & will develop a good brand recall memory in the future.
- 49% of respondents were persuaded to purchase the product, which is a good outcome.
- Audio/visuals, content & discount offers in the advertisement play a major role in brand development.
- Massive reach, power of persuasion & brand image building are the 3 main factors that are being fulfilled through Youtube advertisements.

### Conclusion

YouTube is a media platform which is accessible to the masses, free of cost. India, which is also considered as a market place of the world, holds immense potential & buying capacity in all forms of consumer class. Advertisements, when done with proper strategy formation by the brand can prove to be the most useful tool for marketing.

The study is conducted through respondents which cover all age groups. Through this, brands can understand the perception of each age group & segment their marketing practices in line with customer preference. Advertisements are great to create brand recall value, and brands like Amul, Parle, TATA, Vodafone etc have been successful in doing so.

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# Journal of Indian School of Political Economy

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**DIGITIZATION OF BANKING INDUSTRY IN INDIA: REVIEW OF LITERATURE**

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### Abstract

In India, the digitalization of banking has been a revolutionary movement that has completely changed the way financial services are provided. The government's goal for financial inclusion, the development of new technology, and the expansion of the telecom industry has all contributed to the digitalization of banking in India. The banking industry's digitization is probably going to keep being a major factor in the growth of the Indian financial sector. Every financial transaction is significantly impacted by a variety of e-banking service kinds. The Indian banking industry no longer functions without e-banking services. Banks should concentrate on raising consumer knowledge of e-banking services as they expand. The banking industry will inevitably become more digital as smartphone usage rises to meet global standards. Further changes to India's banking sector are still to come.

**Key words:** Digital, banking, digitization, innovation, india, transformation, internet banking, Jan Dhan Yojana,

### Introduction

A group was formed to look into the situation by Dr. C. Rangarajan, who had previously served as governor of the Reserve Bank of India. From 1985 to 1989, the board of trustees planned the computerization and automation of the financial sector with an emphasis on client administration. The Indian government formally approved the Information Technology Act, 2000 in 2000 to legalise electronic trade and internet transactions. The percentage of young Indians who feel comfortable doing all of their financial dealings online has been rising steadily over the last several years. The banking business in India has lately seen tremendous changes, with the use of information technology being one of the most essential, as a result of demanding clients who have tended to limit their visits to conventional bank offices. All commercial banks in India have adopted internet banking in one form or another, according to a research by the Reserve Bank of India. This is in reaction to customers' shifting preferences, as many now prefer to use their mobile phones to handle their financial transactions. Banks are struggling to compete utilising outdated marketing strategies as a result of their customers' increasing proficiency with computers. This means they have to figure out how to attract the vast majority of their target audience. Because of this, the majority of India's commercial banks have begun providing customers with the option to bank online.

### Evolution of Banking Industry in India

**1921:** There was only one bank in India, and that was the state-owned Imperial Bank of India.

**1935:** As the country's central bank, RBI was founded. The Imperial Bank's function as a central bank was terminated.

**1936-1955:** With this expansion, Imperial Bank now has 480 locations nationwide. The State Bank of India replaced Imperial Bank.

**1956-2000:** Fourteen major commercial banks were nationalised in 1969, and six more were nationalised in 1980. Competitiveness has been ratcheted up with the entrance of private companies like ICICI. Public sector banks are gradually upgrading their technologies.

**2000-2020:** The Reserve Bank of India (RBI) granted the first banking licence to an NBFC in 2003, transforming Kotak Mahindra Finance Ltd into a bank. Following its introduction in 2005, the government abolished the Banking Cash Transaction Tax in 2009.

**2020 onwards:** The Reserve Bank of India (RBI) granted the first banking licence to an NBFC in 2003, transforming Kotak Mahindra Finance Ltd into a bank. Following its introduction in 2005, the government abolished the Banking Cash Transaction Tax in 2009.



### **Banks in India**

Banks in India are classified into four categories:

#### **Commercial Banks**

##### **Public-sector banks**

Public Sector Banks (PSBs) are a major type of bank in India, where a majority stake (i.e. more than 50%) is held by the government. In April 2019, Vijaya Bank and Dena Bank were merged with Bank of Baroda. On 30 August 2019, Union Finance Minister Nirmala Sitaraman announced merger of six public sector banks (PSBs) with four better performing anchor banks in order to streamline their operation and size, two banks were amalgamated to strengthen national presence and four were amalgamated to strengthen regional focuses. Subsequently, the number of public sector bank has been reduced to 12 from 27. This new amalgamation came effective from 1 April 2020.

##### **List of Public-Sector Banks in India as of 1<sup>st</sup> March 2023**

Bank of Baroda, Bank of India, Bank of Maharashtra, Canara Bank, Central Bank of India, Indian Bank, Indian Overseas Bank, Punjab & Sind Bank, Punjab National Bank, State Bank of India, UCO Bank, Union Bank of India.

##### **Private-sector banks**

At present, there are **21** private banks in India. List of Private Banks in India as of 1<sup>st</sup> March 2023: Axis Bank Limited, Bandhan Bank Limited, CSB Bank Limited, City Union Bank Limited, DCB Bank Limited, IDBI Bank Limited, IDFC FIRST Bank Limited, IndusInd Bank Limited, Jammu & Kashmir Bank Limited, Karnataka Bank Limited, Karur Vysya Bank Limited, Kotak Mahindra Bank Limited, Nainital Bank Limited, RBL Bank Limited, South Indian Bank Limited, Tamilnad Mercantile Bank Limited, YES Bank Limited.

##### **Regional Rural Banks (RRBs)**

At present, there are **43** RRBs in India as of 1<sup>st</sup> March 2023.

##### **Foreign banks**

List of notable banks which are incorporated outside India and are operating branches in India: AB Bank, Abu Dhabi Commercial Bank, American Express, Australia and New Zealand Banking Group, Barclays Bank Plc, Bank of America, Bank of Bahrain and Kuwait, Bank of Ceylon, Bank of China, Bank of Nova Scotia, BNP Paribas, Citibank India, Crédit Agricole Corporate and Investment Bank, Credit Suisse, CTBC Bank, DBS Bank, Deutsche Bank, Emirates NBD, First Abu Dhabi Bank, FirstRand Bank, HSBC Bank India, Industrial & Commercial Bank of China, Industrial Bank of Korea, JPMorgan Chase, KEB Hana Bank, Kookmin Bank, Krung Thai Bank, Mizuho Corporate Bank, MUFG Bank, Qatar National Bank, Rabobank, Sberbank, Shinhan Bank, State Bank of Mauritius, Societe Generale, Sonali Bank, Standard Chartered Bank, Sumitomo Mitsui Banking Corporation, United Overseas Bank, Westpac Banking Corporation, Woori Bank

##### **Foreign banks with representative offices**

##### **List of notable foreign banks with representative offices in India:**

Access Bank, Banco Bilbao Vizcaya Argentaria, Banco BPM, Banco de Sabadell, Bank of Montreal, Bank of Taiwan, Busan Bank, Caixa Geral de Depositos, Credit Industriel et Commercial, DNB Bank, DZ Bank, Gazprombank, Intesa Sanpaolo, National Australia Bank, Natixis, Raiffeisen Bank International, Skandinaviska Enskilda Banken, The Bank of New York Mellon, Toronto Dominion Bank, UBS AG, Wells Fargo Bank, Zurcher Kantonalbank.

##### **Small finance banks**

At present, there are **10** RRBs in India as of 1<sup>st</sup> March 2023. Ujjivan Small Finance Bank, Jana Small Finance Bank, Equitas Small Finance Bank, AU Small Finance Bank, Capital Small Finance Bank, Fincare Small Finance Bank, ESAF Small Finance Bank, North Small Finance Bank, Suryoday Small Finance Bank, Utkarsh Small Finance Bank.



**Payments banks**

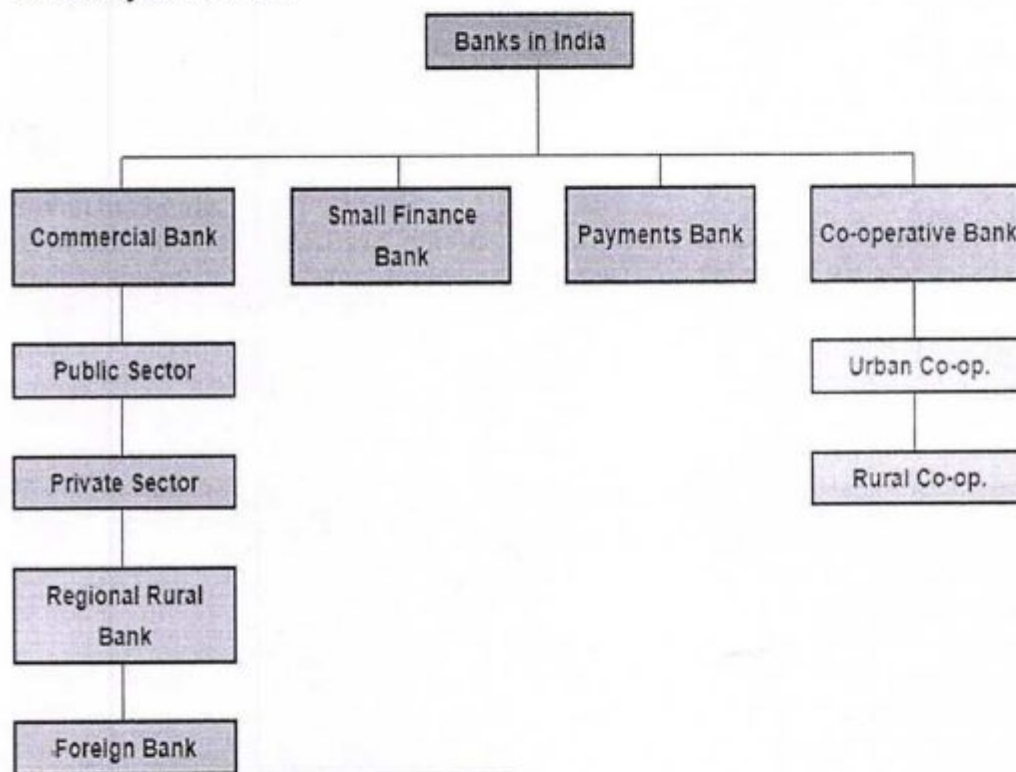
At present, there are 6 RRBs in India as of 1<sup>st</sup> March 2023. Airtel Payments Bank, India Post Payments Bank, Paytm Payments Bank, Jio Payments Bank, Fino Payments Bank

**Co-operative Bank**

State Co-operative Banks (SCBs), at present, there are 34 SCBs in India as of 1<sup>st</sup> March 2023. Urban Co-operative Banks (UCBs), as of 1<sup>st</sup> March 2023, 59 UCBs are operational in India.

**Market Size**

Since 2020, the overall worth of assets owned by banks across different industries has seen a significant rise. According to the RBI's report on the Sectoral Deployment of Bank Credit, the aggregate assets of public and private banking sectors were US\$ 1,553.57 billion and US\$ 901.3 billion, respectively, in the fiscal year 2022-23.

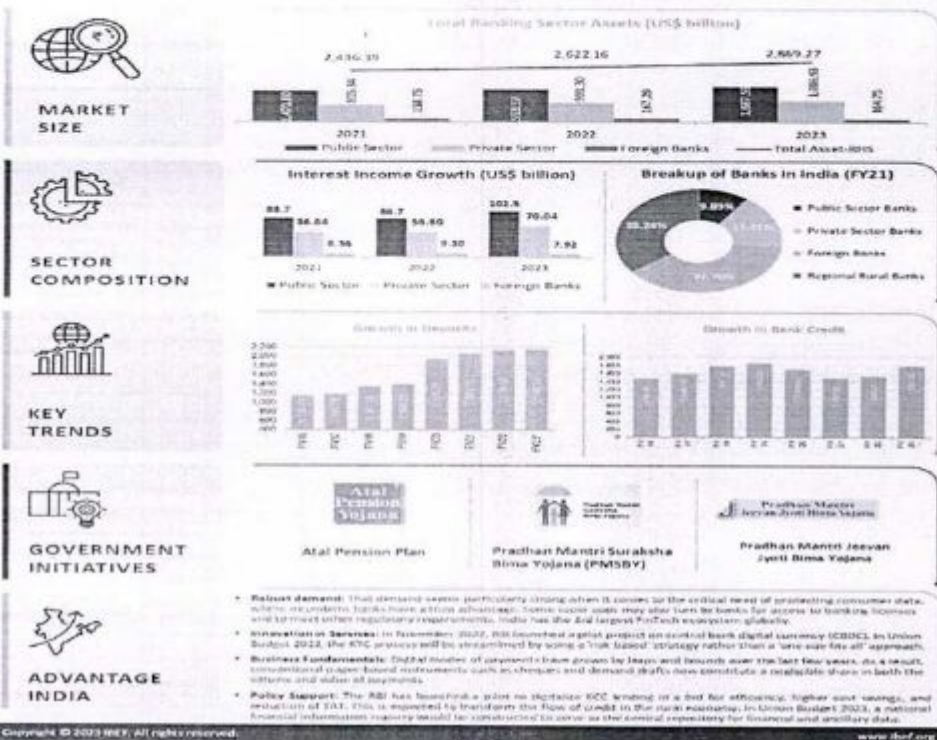


  
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**BANKING**



Source: <https://www.ibef.org/industry/banking-india/infographic>

**Growth drivers of Indian banking sector**

**Economic and demographic drivers:** Positive demographic trends and increasing per capita income have propelled India to number seven on the list of the world's most prosperous countries in 2018. Structural economic stability and the legitimacy of Monetary Policy will help the sector. Rural lending aims to reach the 60% of the rural population that does not have bank accounts. Digital transactions now account for all new bank accounts opened in rural India.

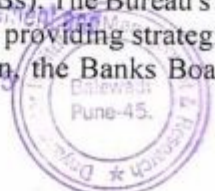
**Policy support:** The Pradhan Mantri Jan Dhan Yojana (PMJDY) allows individuals who do not currently have a savings account to open one with no minimum balance requirement. Additionally, the individual can open a small account if they self-certify that they do not possess any of the legally valid documents needed to open a savings account.

**Infrastructure financing:** In order to fund infrastructure projects in the upcoming fiscal year, the Indian government has allocated over Rs. 1 trillion to the state-owned National Bank for Infrastructure and Development (NABFID). In honor of India's 75th anniversary of independence, there will be 75 DBUs spread throughout 75 districts.

**Open banking eco-system:** Scalability, resilience, monitoring, and frictionless service are the four pillars of open banking, which may expand access to financial services.

**Cross-border payments:** New regulations enacted by the Reserve Bank of India (RBI) make it easier for non-resident Indians (NRIs) to pay their utility bills directly in India through a government-run payment portal. The IBA and RBI collaborated on this project. It is owned by the National Payment Corporation of India.

**Government initiatives:** The government has decided to establish an independent Banks Board Bureau in order to enhance the governance of public sector banks (PSBs). The Bureau's responsibilities include advising public sector banks on leadership appointments and providing strategic and financial planning assistance to these institutions. In addition to the chairman, the Banks Board Bureau also





includes three experts and three ex-officio members. Apart from the ex-officio members, every member of the committee and the chairman work part-time. To support renewable energy projects in India, IREDA teams up with financial institutions in September 2023.

### **Journey of Banking Industry till Financial Inclusion**

**Pradhan Mantri Jan-Dhan Yojana (PMJDY):** Objective of Pradhan Mantri Jan-Dhan Yojana (PMJDY) is ensuring access to various financial services like availability of basic savings bank account, access to need based credit, remittances facility, insurance, and pension to the excluded sections i.e. weaker sections & low-income groups. This deep penetration at affordable cost is possible only with effective use of technology.

**Financial Inclusion - Background:** The endeavours to incorporate the economically marginalized sectors of society into the formal financial system in India are longstanding. The idea was initially proposed by the Reserve Bank of India in 2005, and the implementation of Branchless Banking, carried out through Banking Agents known as Bank Mitra (Business Correspondent), commenced in 2006. In 2011, the Indian Government made a significant effort to promote a programme called Swabhimaan, which aimed to provide banking facilities to over 74,000 villages having a population of more than 2,000 according to the 2001 census.

**Financial Inclusion: Current Status – India:** Despite the implementation of numerous strategies to promote financial inclusion, poverty and exclusion remain prevalent in India's socio-economic and political discussions, even after more than sixty years since gaining economic independence. Despite the significant economic growth witnessed during the post-liberalization era of 1991, the positive effects have not reached all segments of society. As a result, India nevertheless remains home to one-third of the world's impoverished population.

### **Mission Mode Objectives**

It comprises of the following six pillars. The first three pillars would be given thrust in the first year. Universal access to banking facilities; Providing Basic Banking Accounts with overdraft facility and RuPay Debit card to all households; Financial Literacy Program; Creation of Credit Guarantee Fund; Micro – Insurance; and Unorganized sector Pension schemes like Swavalamban.

### **Role of Technology in Financial Inclusion**

To make available the banking facilities across the length and breadth of the country, latest technological products like e-KYC, IMPS, AEPS, mobile banking, micro-ATM, Rupay Debit Card etc. have the potential to emerge as a game changer in terms of costs, convenience, and speed of reach. Core Banking Solutions (CBS) is a step towards enhancing customer convenience through, Anywhere, Anytime Banking. The adoption of CBS led to various technological products like NEFT, RTGS, mobile banking, Internet Banking, ATMs, etc.

### **Challenges identified in the implementation of the Mission**

- i. Telecom connectivity
- ii. Keeping the accounts "Live"
- iii. Brand awareness and sensitization
- iv. Commission to Bank on Direct Benefit Transfer (DBT)
- v. Coverage of difficult areas

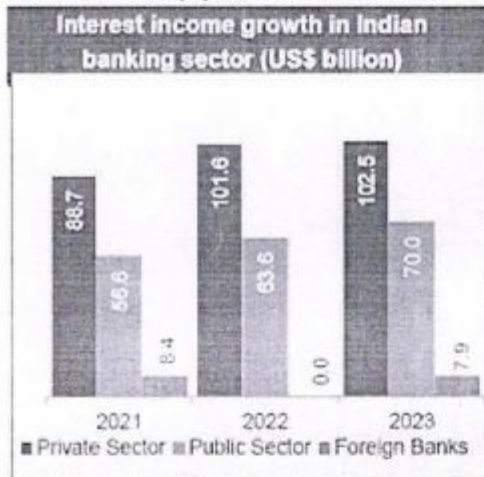
  
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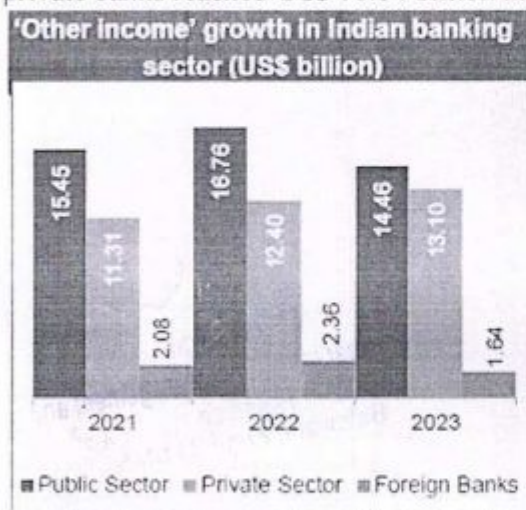
Source: Indian Bank's Association

The combined assets of governmental and private banks in 2022–23 was \$1687.59B and \$1016.93B, respectively. The total assets of all banks in 2022–23, whether public, private, or international, were 58.81% held by public sector banks.



Source: Indian Bank's Association

In the fiscal year 2022–23, interest income was more than 48.05 percent for public sector banks. Public banks earned a total of US\$ 102.48 billion in interest for the fiscal year 2022–23. Interest income for private banks reached US\$ 70.04 billion in 2022–23.



Source: Indian Bank's Association

  
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Public sector banks received around 49.52% of the total revenue in 2022–23. In the fiscal years 2022 and 2023, public sector banks had "other income" of \$14.46 billion. "Other income" in the private banking industry amounted to US\$ 13.10 billion in the fiscal year 2022–203.

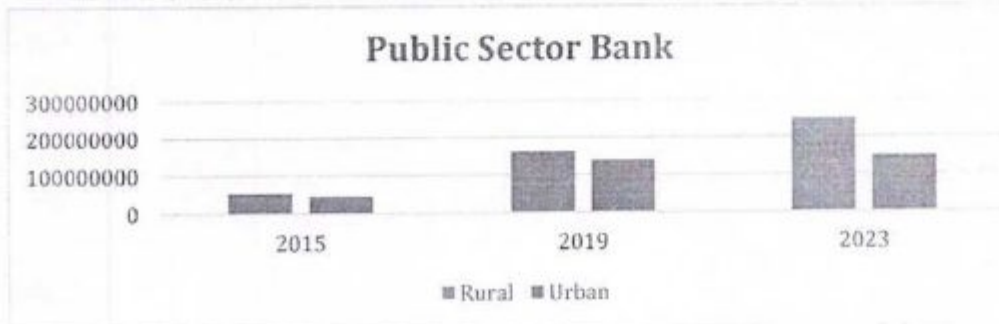
**Analysis of Number of Accounts Opened Under PMJDY as on 31.01.2015, 27.11.2019 and 29.11.2023.**

**Public Sector Bank**

	Rural	Urban
31.01.2015	53300249	45147276
27.11.2019	161659388	137681247
29.11.2023	249302471	148108380

**Table 1: Public Sector Bank**

From Table 1, total number of 98447525 accounts were opened as on 31<sup>st</sup> January, 2015 out of 53300249 (54%) & 45147276 (46%) accounts were opened by Rural and Urban Public Sector Bank. Whereas total number of 397410851 accounts were opened as on 29<sup>th</sup> November, 2023 out of 249302471 (37%) & 148108380 (63%) accounts were opened by Rural and Urban Public Sector Bank.



**Private Sector Bank**

	Rural	Urban
31.01.2015	3226397	2012086
27.11.2019	6958441	5558222
29.11.2023	7202200	7378545

**Table 2: Private Sector Bank**



From Table 2, total number of 5238483 accounts were opened as on 31<sup>st</sup> January, 2015 out of 3226397 (62%) & 2012086 (38%) accounts were opened by Rural and Urban Private Sector Bank. Whereas total number of 14580745 accounts were opened as on 29<sup>th</sup> November, 2023 out of 7202200 (49%) & 7378545 (51%) accounts were opened by Rural and Urban Private Sector Bank.

**Rural Regional Bank**

**Table 3: Rural Regional Bank**

	Rural	Urban
31.01.2015	18489448	3297833
27.11.2019	52220218	11936568
29.11.2023	83248456	13627413

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From Table 3, total number of 21787281 accounts were opened as on 31<sup>st</sup> January, 2015 out of 18489448 (85%) & 3297833 (%) accounts were opened by Rural and Urban Rural Regional Bank. Whereas total number of 96875869 accounts were opened as on 29<sup>st</sup> November, 2023 out of 83248456 (14%) & 7378545 (51%) accounts were opened by Rural and Urban Private Sector Bank.

### Products and Services offered by Banks in India

Indian banks provide a comprehensive range of products and services to meet the varied financial requirements of individuals, corporations, and other sectors. The main offerings consist of Banking Products:

**Savings accounts** are specifically designed for individuals to deposit and withdraw funds while also generating interest.

**Current Accounts** are specifically designed for enterprises and companies to facilitate their everyday financial activities. These accounts do not accrue any interest on the balances.

**Fixed Deposits** are term deposits that have a set duration and established interest rates. They provide higher yields.

### Types of Loans

**Home Loans:** Loans offered for the purpose of acquiring or building residential homes.

**Personal Loans:** Unsecured loans designed for personal expenses, typically with a shorter duration for payback.

**Vehicle Loans:** Financing options available for the acquisition of automobiles, motorcycles, or other means of transportation.

**Education Loans:** Provide financial support for pursuing higher education, including covering expenses such as tuition fees and lodging.

**Business Loans:** Financing options available for the purpose of expanding a firm, funding day-to-day operations, or addressing special business requirements.

**Investments:** Banks frequently provide consumers with opportunities to invest in mutual funds.

**Insurance:** Banks provide a range of insurance products, including life insurance, health insurance, and general insurance.

### Online banking services:

**Internet Banking** provides users with convenient and secure online access to their account information, allowing them to easily perform tasks such as fund transfers and bill payments.

**Mobile Banking** refers to the provision of banking services through mobile applications, enabling users to perform transactions and maintain their accts.

**Unified Payments Interface (UPI)** enables immediate movement of funds between bank accounts through cell phones.

### Financial instruments

**Debit cards** are commonly utilized for making withdrawals from ATMs and conducting transactions, typically associated with savings accounts.

**Credit cards** are available with a range of incentive programs and benefits, enabling users to make purchases on credit.

**Prepaid cards** are cards that come with predetermined amounts of money loaded onto them, and they can be used for certain purposes such as travel or gifting.



### **International trade and foreign exchange services**

**Foreign Exchange Services:** Enabling the conversion of currencies and the transfer of money.

**Trade Finance** encompasses a range of services that facilitate international trade transactions, such as letters of credit and bank guarantees.

### **Products related to retirement and pension**

**Pension plans** are financial arrangements that offer individuals financial stability after they retire, typically in partnership with insurance companies.

**Employee Provident Fund (EPF)** is a government-administered pension program designed for employed individuals to save for retirement.

### **Benefits of digitization to the bank**

It reduces operational costs by reducing office activities, minimizes errors, and lessens the number of personnel needed for jobs. Implementing digital technologies can enhance the administration quality, delivery, and efficiency of banks, thereby providing them with a competitive advantage. By removing obstacles on land, it paves the way for the expansion of operations for small banks. As a result, this enhances the ability of loan lenders to evaluate the financial stability of prospective borrowers. Various studies have shown that the performance of the financial sector gradually improves due to the increasing utilization of technology.

### **Government Initiatives**

Initiatives like the Digital India campaign and the push for financial inclusion through programs like Pradhan Mantri Jan Dhan Yojana (PMJDY) have played a crucial role in expanding access to banking services, especially in rural areas.

**Mobile Penetration:** The widespread adoption of smartphones and increased internet accessibility has facilitated the growth of mobile banking and digital payments.

**Fintech Innovation:** The rise of fintech companies has introduced innovative solutions, such as mobile wallets, peer-to-peer lending platforms, and digital lending, disrupting traditional banking services.

**UPI (Unified Payments Interface):** UPI has revolutionized the way payments are made in India. It allows users to transfer funds instantly between bank accounts using a mobile platform.

**Digital Wallets and Payment Apps:** Services like Paytm, Google Pay, PhonePe, and others have gained immense popularity, offering convenience and security in transactions.

**E-KYC and Aadhaar Integration:** Aadhaar-enabled services have simplified customer verification processes, making it easier to open accounts and access banking services remotely.

**Data Analytics and AI:** Banks are increasingly leveraging data analytics and artificial intelligence to offer personalized services, manage risks, and improve operational efficiency.

**Cyber security Measures:** With the increase in digital transactions, there's a growing emphasis on cybersecurity to protect customer data and financial assets.

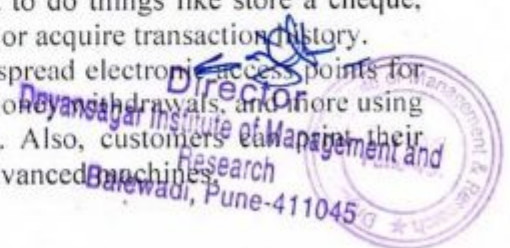
### **Extent of electronic banking:**

Electronic banking encompasses the following

**Internet Banking:** Banks offer a range of services through the web, which is an incredible medium. This includes educating customers on the basics of the bank's products and services, assisting them with questions or concerns related to their accounts or credit applications, and facilitating online transactions like bill payments, asset transfers, and more.

**Phone banking:** often known as mobile banking, allows customers to communicate with the bank simply by utilising their mobile devices' keypads. One can use it to do things like store a cheque, transfer funds, pay fees, see their account balance, locate an ATM, or acquire transaction history.

**Automated Teller Machines (ATMs):** These were the first widespread electronic access points for customers. Customers can ask about their account balance, make money withdrawals, and more using these devices, all without having to speak to a bank employee. Also, customers can manage their passbook, store money, and get a credit extension with the more advanced machines.





**Plastic Cards:** Financial institutions often issue plastic cards to their customers in the form of credit, debit, or smart cards. These cards simplify the process of making instalment payments for the aim of offering, providing easy access to credit for a specified period, or performing various types of pre-characterized monetary exchanges.

**Electronic Clearing Service (ECS):** ECS is mostly used to try repetitive and intermittent instalments electronically. Organisations use it to pay phone/power/water taxes, cess, and so on, or to make large payments towards profit, intrigue, pay, benefits, etc. circulation.

### Challenges in execution

In order to fully participate in innovation and provide the necessary support for its development and implementation, a nation needs a sufficient level of framework. However, the foundation in India is just starting out. Although many have been anticipating it, the web network has not yet reached many. The security and safety of information transmitted over the online is vulnerable to theft, unauthorised access, and abuse because the web is an open communication infrastructure. No company in India is immune to cybercrime or hacking; even the most reputable ones face these problems. Because of this, people no longer have faith in the sophisticated banking practises of certain banks. Even though the Indian financial sector is heavily regulated in terms of capital sufficiency requirements, provisioning and resource acknowledgment standards, projects, etc., it is difficult to extend these regulations to digital banks.

### Impact of Digitalization on Bank Performance

Digitalisation has transformed the banking industry, shifting from branch-to-bank customer relationship, empowering customers, and reducing branch dependency, thereby enhancing their financial obligations. The Indian banking industry is focusing on cost reduction through digitalisation, despite incurring infrastructural and training costs. As more people adopt digital platforms, cost benefits will accrue. Digital banking has positively impacted bank profitability due to customer satisfaction and economic growth in India, motivating external players to offer digital financial services. Digitalization has improved the banking industry's efficiency, with government and industry efforts aiming to reduce cash transactions. Employee training and feedback can enhance adaptability. The government's digital banking campaign aims for a less cash society, necessitating robust systems like the Unified Payments Interface (UPI) to meet customer expectations and competition. Government and private players address digital banking challenges, with increasing rural penetration indicating potential for increased adoption. Increased incentives, high-speed internet, and awareness programs boost customer confidence.

### Review of Literature

The researcher has reviewed many research papers written by foreign and Indian authors related to banking. The study is greatly interested in digitization of Banking Industry in India. The summary of the review of literature is given below:

Sharma, R., Chowhan, S. S., & Arya, R (2021), suggest that the adoption of digitalization in the private banking sector is essential for the growth and stability of the economy. The study highlights the importance of understanding the psychological behavior of consumers towards digitalization in the private banking sector to further give more wings to digitalization.

Santiago Carbo-Valverde (2017) discusses the impact of digitalization on banking activities and challenges that impose for financial stability.

Sinha and Mukherjee (2016) found that trust on innovation, trust on bank, saw convenience, saw handiness, and many-sided quality fundamentally influences customers to use off-branch account management in India.

Rahmath Safeena et.al, (2012) identified that, the evolution of e-banking began with the introduction of Automatic Teller Machines (ATMs) and telephone banking (tele-banking), followed by direct bill



payment, electronic cash transfer, and the transformative shift from traditional banking to online banking, which can be considered a significant leap forward.

Prema C (2013) Analyzed the procedure of internet banking services and emphasizes the need for marketing professionals to highlight the advantages it offers. Additionally, increasing awareness can enhance the ability to attract consumers' interest in internet banking services.

V. Raja, Joe A. (2012), utilized secondary data to examine the different tiers of internet banking services offered by banks. Additionally, it juxtaposes the conventional financial systems with online banking. The text enumerates the diverse benefits of internet banking and the effective security procedures implemented by various banks to ensure secure financial operations. Additionally, it examines the utility of E-banking for the banking industry throughout the current global financial crisis.

Nel, J., Boshoff, C., and Raleting, T. (2012) conducted a study on how Short Message Services (SMS) influences this attitude building process. The study examined the moderating impact of "SMS usage" using a structural equation modeling multi-group approach. The results indicated that the impact of Ease of use on Attitude and of Self-efficacy on Ease of use were more pronounced among High users and significantly distinct from Low users.

Traynor P., Amrutkar C., Rao V., Jaeger T., McDaniel P., Porta T. L., (2011), studies that mobile phones have transformed from basic voice devices into sophisticated, versatile computing systems. This study focuses on explore the convergence of cellular networks and the Internet, and how this convergence affects the efficient allocation of resources and the level of service quality.

Pal, R., & Kumar, S. (2023) states that Public sector banks exhibit greater uniformity and reduced variability in the installation of ATM machines in comparison to private sector banks. When analyzing the compound annual growth rate (CAGR) by sector, private sector banks demonstrate more favorable outcomes than public sector banks.

Wali et al. (2014) had stated that the implementation of a cashless policy has a significant effect on the marketing performance of retail locations. However, it was demonstrated that the utilization of point of sale terminal (POS) as a tool for implementing a cashless policy is strongly and positively correlated with the profitability and sales volume of a retail store.

Uday Singh Rajput (2015) in his study tried to examine customers' perspective of e-banking services provided by specific commercial banks. The residents of these places were not utilizing e-banking services regularly due to their limited understanding of computers and the internet, resulting in their reluctance to use such services.

Kaur (2017) has analysed that the expansion of various electronic banking services provided by financial institutions. Recent findings indicate that e-banking services play a crucial role in transitioning the Indian economy from a cash-based system to a cashless one. There was a significant increase in the deployment of ATM machines by banks, indicating a substantial growth in the number of ATMs during that period.

Anis Ali and L.S Bisht (2018) examined the disparity in satisfaction levels between customers of private and public sector banks, taking into account multiple factors of satisfaction. However, there was a greater disparity between their perception and expectation in private sector banks. The clientele of public sector banks expressed dissatisfaction with the intermittent services of ATMs in rural and distant regions, which were consistently overcrowded. The study indicated that clients expressed higher satisfaction with private sector banks compared to public sector banks.

Meena, R. K. (2019) studies that The Indian government plays a significant role in fostering a favorable consumer mindset. Conventional banks need to acknowledge that they are not the exclusive participants in the industry, and fintech firms have a plethora of benefits to offer to technologically advanced customers. Indian banks should address the possible adverse impacts of computerized disruption on their incentives by promoting advanced mindfulness and striving to achieve minimal objectives, ultimately resulting in linguistic progress.

Harchekar, J. S. (2018) the mobile and wireless market is rapidly growing, providing a new platform for the banking industry to connect customers anytime, anywhere. Global communication is



leading to a new generation of strong banking relationships. To succeed, banks must accommodate customer needs, stay competitive, and adapt to new technologies. Ensuring safety and security are key strategies for growth and success.

### Conclusion

Traditional bank branches should replace their traditional physical locations with more modern forms of proximity. Also crucial is the role of the Indian government in creating a conducive environment to promote an optimistic outlook among customers. At the same time, traditional banks need to get a clue and realize that they aren't the only game in town anymore. The new entrants, who are fintech startups, have a lot to offer digitalized customers, and the two can actually work together to ensure success. The PMJDY program has been incredibly successful. Banks and the government both face the problem of ensuring that these accounts remain active. People from all walks of life should be able to effortlessly deposit and save money in banks. It follows that people's lives have been improved by new banking technology and banks performance has improved. There may be selective perception of consumers towards services provided by the private banking sector. The study also found that the psychological behavior of consumers towards digitalization in the private banking sector. Both public and private sector banks should focus on promoting e-banking services and enhancing customer satisfaction. The banking sector needs to prioritize the dissemination of awareness on the utilization of e-banking services, in addition to fostering growth and development. Traditional cash payments are being replaced by Digital Wallets with Digitalization.

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## MEASURING FINANCIAL PERFORMANCE OF NSE LISTED SELECTED FERTILIZER COMPANIES IN INDIA BASED ON ALTMAN'S Z SCORE

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### ABSTRACT

This study focuses on eight selected leading fertilizer companies in India listed on the National Stock Exchange (NSE). The aim of the study is to assess the financial performance of the selected companies in the past five years. Mostly, the health of the companies is assessed using traditional methods such as ROIC, EPS, ROA, ROS and ROE. These traditional models do not accurately predict whether the companies are heading for bankruptcy. In this study, data from eight companies - Coromandel International, Chambal Fertiliser, Gujrat Narmada Valley Fertilizers and Chemicals, Deepak Fertilizers and Petrochemicals, Fertilizers and Chemicals Travancore, Tata Chemicals, National Fertilizers and Rashtriya Chemicals and Fertilizers - are analyzed using the Altman's Z Score. Financial stability is calculated based on Altman's Z Score and to foresee if the company is not heading towards bankruptcy. This study supports the claim that Altmans Z Score accuracy is over 80%. The trend analysis in this study provides a meaningful result for predicting the financial performance of selected companies.

**Keywords:** Fertilizer companies, Altman's Z Score, bankruptcy, subsidy, distress

### Introduction

India's main source of income is agriculture. As per the Fertiliser Association of India, the sector contributes about 18.8% to India's GDP (for the Financial Year 2021-2022). And about, India's 58% of population is engaged in agriculture activities. Even though Indian agricultural production is independent, cultivation varies from region to region and requires a high labor input. Many rural households depend mainly on agriculture for their livelihood. Farmers for increasing their income mostly use fertilizer made from chemicals and organic material for better crop production. Organic and chemical fertilizers affect the productive land through soil degradation and erosion. The success of the agricultural sector depends mainly on the fertilizer industry. The fertilizer industry produces important plant nutrients that support the cultivation of crops. The Indian fertilizer industry produces phosphorus-containing fertilizers like diammonium hydrogen phosphate, Ammonium Dihydrogen Phosphate, Potassium, Nitrogen and Phosphorus and mono superphosphate, which contribute to healthy crops. The Indian government supervises and regulates the fertilizer industry and offers fertilizers to farmers at subsidized prices. Farmers are offered subsidies and the government reimburses fertilizer producers for the difference between the cost of manufacturing and the selling price. Based On the government figures, total output of fertilizer in 2021-22 was 43.66 million metric tons. India currently imports about 38% of the country's fertilizer requirements. The Chemical and Fertiliser Department of the Indian government has launched various initiatives to make the country self-reliant in fertilizer production. The government has prepared the following road map:

- Phosphorus fertilizer at further subsidized prices
- Expanding production of phosphorite deposits
- Exploration of potential potassic ore resources
- Encouraging joint ventures abroad
- the acquisition of fertilizer raw material producers worldwide

By the year 2023, India has plans to be reliant on all fertilizer production. To curb imports, the government is planning greenfield projects for fertilizer production. Records show that about two trillion rupees were planned for fertilizers as subsidies to farmers in FY 2021. The 'Aatmanirbhar Bharat' programmed and the outlined roadmap for the fertilizer industry will help India become an independent producer of phosphate-based fertilizers in the years to come and accelerate agricultural production.

### Literature Review

There are some research papers about the topic in the literature. In 1968, Altman published the Altman's Z Score for predicting bankruptcy. For the analysis of the company's financial situation, Dr. Amey Choudhari uses key figures from the company balance sheets and the profits and losses statements. The Z Score formula can be used to forecast the possibility that a corporation may go bankrupt in the next few years. Speculative studies are conducted using the Z Score formula to forecast the bankruptcy of companies. The Z Score can be effortlessly calculated to



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analyze financial distress and to determine whether control measures can be adopted.

Since, the Indian fertilizer industry is dynamic and the sales of fertilizer companies largely depends on seasonal conditions, Altman's Z Score model proved more suitable than the traditional methods. Also, looking at the measures taken by the Government of India to be self-reliant in fertilizer production have led to numerous investments and technology transfers in recent years. The literature review included the study of the Altman's Z Score model and past application for various industries worldwide. Few segments that were studied were banks, pharmaceutical companies, manufacturing companies, hospitality companies, agricultural companies and few more.

Altman's Z-Score consists of a formula that includes several variables to predict the Z-Score value. All the research studied used the same formula with the variables required for each industry. The accuracy of Altman's Z Score formula is between 80 and 90% for predicting insolvencies a year before they occur.

Khande (2019) note in their paper on profitability analysis of fertilizer companies state that while several large fertilizer companies are profitable overall, however, profitability increases only marginally over a period of time. They also claim that there has been a significant amount of raw material imported each year for fertilizer production. This also suggests that profitability is affected as the raw material is imported and purchased at a higher cost.

(FAI, 2022) Indian Fertiliser Association said at a press release that margins for fertilizer manufacturers are very low and new investments will be difficult in the near future unless subsidies are revised. This also indicates that the fertilizer industry needs a proper assessment of the financial strength of each manufacturing company to determine whether they are heading for bankruptcy.

(Sowmiyaa, 2021) have analyzed in their study of the Indian fertilizer industries on their financial performance, which consists of the private, state, and cooperative enterprises. Their conclusions state that most of the companies are in distress zone and immediate action is required. Their study compares all the three segments and analyzes the extent of distress levels amongst the three segments. The samples were randomly selected across all vertical segments. They used Altman's Z Score for prediction. However, a lot has happened in the last three years since their study was published. The government's data shows that fertilizer companies in India have received significant support post-Covid. Their report will help in analyzing the trends of similar companies selected for this study.

(Batchelor, 2018) conducted detailed research to predict the efficacy of Altman's ZScore. Five unsuccessful and five successful enterprises were selected for the study. Based on the five successful and five unsuccessful enterprises tested, the analysis showed that the modified Z Score model yielded significant results indicating failure. The results concluded that Altman's ZScore is a very reliable method to determine whether a company will go bankrupt.

Swaliha (2020) has studied the Indian automobile industry to assess financial soundness. Altman's Z-Score calculated the most accurate results and predicted that Indian automobile companies are safe, and investors can safely invest. Their study found that the Altman's Z-Score model proved to be an extensively useful and excellent model for analyzing the financial stability of companies. It is an excellent tool for analysts working in finance and investors to assess the financial status of companies and to take appropriate measures to overcome insolvencies.

#### Objectives Of This Study

- Financial performance evaluation of NSE listed selected fertilizer companies.
- Applying the Altman's Z Score method, examine the financial performance of the fertilizer companies selected above.
- Perform a trend analysis for the selected fertilizer companies based on Altman's Z Score method.
- And finally, assess whether the companies are financially stable and not heading for bankruptcy.

#### Methodology

The samples of fertilizer companies were selected on the basis of their sales and stock performance in the past 3 years. The selected companies are listed on the National Stock Exchange (NSE) and are members of the Fertiliser Association of India. Based on the past financial performance and market capitalization in the past 3 years, 8 companies were selected. Data was collected from annual reports and company websites. The quantitative analysis was carried out on the basis of the figures available in the balance sheets. Data for the last



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five years was obtained for the companies studied. The analysis of the Z Score was evaluated for the financial years from 2018 to 2022. The survey period covers the pre covid and the post covid years. This also will help to understand if there was any impact on the fertilizer industry post covid. This research uses an exploratory and analytical method to evaluate the conclusions.

**Fertilizer Companies Selected for Study:**

1. Chambal Fertilizers & Chemicals Ltd
2. Coromandel International Ltd
3. Gujarat Narmada Valley Fertilisers & Chemicals Ltd
4. Deepak Fertilizers & Petrochemicals Corporation Ltd
5. Fertilisers & Chemicals Travancore Ltd
6. Tata Chemicals Ltd
7. National Fertilisers Ltd
8. Rashtriya Chemicals & Fertilisers Ltd

**Application of Altman Z Score Model**

The following techniques are used to obtain the variables listed in the Z Score formula and arrive at the conclusions:

- 1) Review of financial statements to determine the availability of data required for the Z Score analysis
- 2) Estimation of the market capitalization and other variables of each company for the last five years
- 3) Estimation of the relationships between the variables
- 4) Normalization of the data
- 5) Draft analysis to check whether the results are conclusive
- 6) Evaluation and interpretation of the results using the formula

The formula for the Altman's Z Score is as below:

$$Z = 0.012V_1 + 0.014V_2 + 0.033V_3 + 0.006V_4 + 0.999V_5$$

Based on the above formula, the following derived formula is obtained:

$$Z = 1.2V_1 + 1.4V_2 + 3.3V_3 + 0.6V_4 + 1.0V_5$$

The variables (V) in the above formula are described below:

$V_1$  = working capital divided by total assets (where, working capital = current assets divided by current liabilities)

$V_2$  = retained earnings divided by total assets (where retained earnings = net income divided by loss plus retained earnings of previous years minus the net dividends)

$V_3$  = EBIT divided by total asset (Where, EBIT = Earnings Before Interest and Taxes)

$V_4$  = market capitalization (market value) divided by book value (Where: Market capitalization = Present Market Price of every share multiplied by Aggregate Number of shares outstanding, And Book value = total assets minus the total liabilities)

$X_5$  = Sales divided by total assets

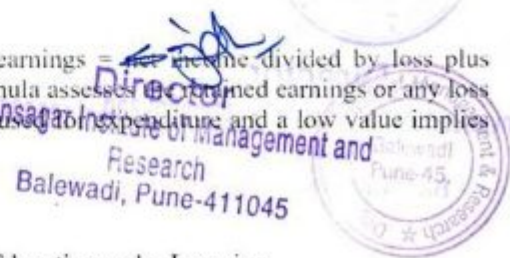
Z = Z Score index

The Z Score method has shown an accuracy level of 80-90% and is more reliable than traditional methods of assessing financial stability. A high Z Score suggests a good corporate health, while a low Z Score suggests a greater risk of bankruptcy

**The explanation of Altmans Z Score method can be found below:**

$V_1$  = working capital divided by total assets (where, working capital = current assets divided by current liabilities)  
: This formula is used to assess the short period financial strength of a company. A positive result indicates that the company will be able to sustain the short-term commitments, and a negative result indicates the company will strive to meet the present needs.

$V_2$  = retained earnings divided by total assets (where retained earnings = net income divided by loss plus retained earnings of previous years minus net dividends): This formula assesses the retained earnings or any loss to the company. A high value implies that the retained profits are used for expenditure and a low value implies





that the retained profits are saved.

$V_3$  = EBIT divided by total asset (Where, EBIT = Earnings Before Interest and Taxes): This formula signifies the profitability of the company. It determines whether the company can generate enough income from the business to meet the present needs.

$V_4$  = market capitalization (market value) divided by book value (Where: Market capitalization = Present Market Price of every share multiplied by aggregate number of shares outstanding. And, Book value = total assets minus total liabilities): This formula measures the degree of impairment of market value when the company files for insolvency. A high ratio means that investors have more confidence in the company's shares.

$X_5$  = Sales divided by total assets: This formula implies that the company is able to generate revenue based on its assets. A high ratio indicates the financial strength of the company.

Below are details on interpreting the results based on Altman's ZScore analysis.



Fig-1 Altman's Z-Score Method of interpretation

#### Analysis Of The Data

Altman's Z Score analysis for the selected Fertilizer companies in India (2018-2022).

Companies	2018	2019	2020	2021	2022	Average (mean of 5 years)	Analysis
Chambal Fertilisers and Chemicals Limited	1.451	1.195	1.485	2.537	2.253	1.78	Distress
Coromandel International Limited	1.795	1.947	2.32	3.269	3.29	2.52	Grey
Deepak Fertilisers and Petrochemicals Corporation Limited	1.279	1.703	1.681	1.942	2.294	1.78	Distress
The Fertilizers and Chemicals Travancore Ltd	0.397	1.33	2.229	1.539	2.01	1.50	Distress
Gujarat Narmada Valley Fertilizers & Chemicals Limited	2.269	2.287	1.851	2.265	2.961	2.33	Grey
National Fertilizers Limited	1.307	1.213	1.074	1.914	1.984	1.50	Distress
Rashtriya Chemicals and Fertilizers Limited	2.078	1.666	1.516	2.106	2.135	1.90	Grey
Tata Chemicals Limited	2.706	3.381	4.309	4.744	4.665	3.96	Safe

Table no.1

The Z Score formula uses the five variable ratios which are multiplied and added together to give a single

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number. This single number is termed as the Z Score and assesses the financial health of the organization. Z Score is computed by multiplying each variable (financial ratios) by a given constant number and finally summing the values to obtain the results. In this study, balance sheet figures for the last five years from each of the companies studied were used for all Z Score calculations.

Based on the results, it is evident most businesses are in distress. The analysis also suggests that the companies are not financially stable. With the exception of Tata Chemicals, all the other seven companies are either in distress or in the grey zone.

Looking only at the last two years, all the companies have achieved a positive result. This could be due to the government's initiative to focus on the agricultural sector to make it self-sufficient. The companies included in the analysis generate most of the turnover in the fertiliser business in India. Hence, these results can be extrapolated to other fertilizer companies in India.

Another important point is that the fertilizer industry has shown a positive trend after the Covid period. The pre-Covid figures are too low and every company seems to have been in distress. The companies in distress areas are Chambal Fertilizers, Deepak Fertilizers, The Fertilizers and Chemicals Travancore and National Fertilizers. They may have to look for other options to improve their financial performance. Other options may include diversification and investment in greenfield projects. Coromandel International, Gujarat Narmada Valley Fertilizers & Chemicals and Rashtriya Chemicals and Fertilizers are in the grey zone, which means they could fall in distress if they do not act on their performance metrics now. The companies in the grey zone are also the fence-sitters.

### Conclusions

Based on the study findings, the fertilizer industry is currently in the distress area, but the situation seems to have improved in the last two years. Tata Chemicals is the only company that is in the safe zone. This study also supports the claim that Altman model is a precise tool for understanding the financial performance of companies. According to the Fertiliser Association of India, a healthy compound annual growth rate (CAGR) of about 12% is expected for the years 2020 – 2025. Increasing demand and population growth, restrictions on raw material imports, procurement of raw materials from domestic sources, changing customer needs and Government of India initiatives will boost the fertiliser industry scenario in India. New areas of diversification based on research and technology transfer seem to be fueling the growth of the fertiliser industry. Government initiatives regulate subsidies and several of the companies are government owned, which played a crucial role for the fertiliser industry development in India. With the advent of organic fertilizer, there seems to be a strong growth potential for the fertilizer industry in India soon.

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