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List of Books / Research Papers

Sr. No.	Name of the Teacher	Title of Paper/Book Published	Name of the Authors	Name of the Publisher	ISBN/ISSN Number	Year of Publication
1	Miss. Heena Shaikh	Bio-Inspired Intelligence for Smart Decision-Making	Ramkumar Jaganathan, Shilpa Mehta, Ram Krishnan	IGI Global	2327-0411	2024
2	Mr. Armaan Shaikh	The Most Effective Social Media Techniques to Increase Customer Engagement	-	Shodhsamhita	2277-7067	2023



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3	Miss. Gauri Jadhav	Digital Transformation Challenges in Agro SME's in Pune District, India	-	Madhya Pradesh Journal of Social Science Research	0973-855X	2023
4	Miss. Shilpa Khade	A study of Customer Awareness About Environmentally Sustainable Green products and Impact of Green Marketing On Customer Purchasing Decisions in Eastern Pune City (Spread Across Pune Nagar Road)	-	Madhya Pradesh Journal of Social Sciences	0973-855X	2023
5	Mr. Armaan Shaikh	Review of Centrally Sponsored Schemes for Employment	-	Madhya Pradesh Journal of Social Sciences	0973-855X	2023
6	Miss. Heena Shaikh	Impact of COVID-19 on Banking Sector: An Indian Viewpoint	-	Shodhsamhita	2277-7067	2023
7	Mr. Armaan Shaikh	Impact of COVID-19 on Banking Sector: An Indian Viewpoint	-	Shodhsamhita	2277-7067	2023
8	Miss. Archana Mhaske	An Awareness of HTML5 and HTML6 in Web Development	-	Madhya Pradesh Journal of Social Sciences	0973-855X	2023



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Bio-Inspired Intelligence for Smart Decision- Making

Ramkumar Jaganathan
Sri Krishna Arts and Science College, India

Shilpa Mehta
Auckland University of Technology, New Zealand

Ram Krishan
Mata Sundri University Girls College, Mansa, India



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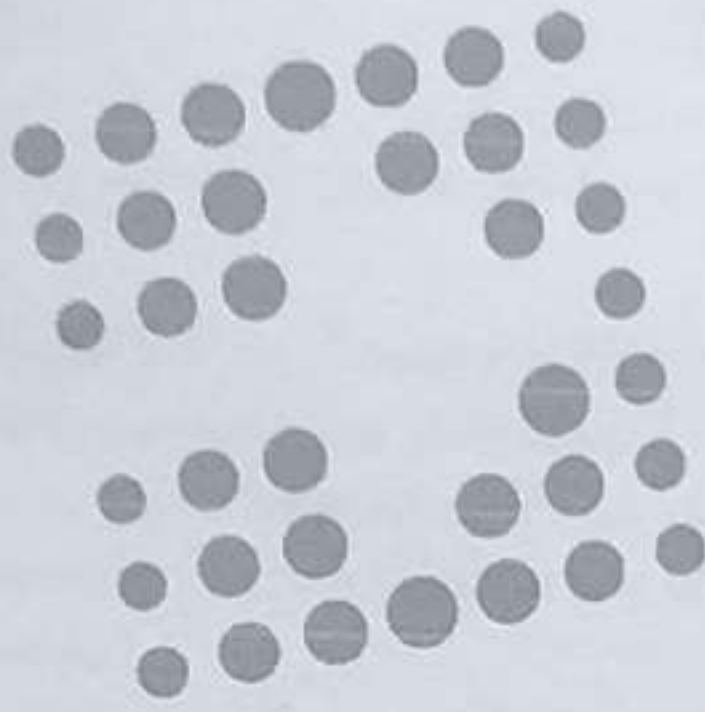
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Chapter 11

Challenges and Future Prospects of Intelligent Decision Making

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ABSTRACT

Data analytics, AI, and machine learning are driving intelligent decision making, which is becoming more and more important across a range of industries, including technology, business, and healthcare. This chapter explores the challenges faced in intelligent decision making and discusses the promising prospects that lie ahead in the realm of data-driven, intelligent decision support systems. To overcome the challenges facing IDM, it is important that the data used to train and implement IDM systems needs to be carefully curated and cleaned. Despite the challenges, the future prospects for IDM are very bright. As IDM systems continue to improve and become more widely adopted, they have the potential to improve decision-making, automate routine decision-making tasks, augment human decision-making, etc. We can make sure that IDM systems are used to improve the world by addressing these issues.


INTRODUCTION

In the dynamic landscape of artificial intelligence (AI) and machine learning (ML), intelligent decision-making stands as a cornerstone, wielding the potential to redefine

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how we navigate complexities and make critical choices. This chapter embarks on a journey to unravel the intricacies, addressing the challenges that cast shadows on the current state of intelligent decision-making while envisioning the bright prospects that await us on the horizon.

The realm of intelligent decision-making is marked by both triumphs and tribulations, with algorithms, models, and systems becoming integral components of our technological tapestry. Yet, as these decision-making entities become more sophisticated, questions of bias, interpretability, and ethical considerations come to the forefront. It is crucial to confront these challenges head-on, understanding that the path to a future where intelligent decision-making is seamlessly integrated into our lives requires a comprehensive examination of the obstacles that stand in our way.

Simultaneously, the future beckons with promises of innovation and refinement. The prospects of intelligent decision-making are not merely speculative; they are the potential outcomes of deliberate and visionary advancements. Enhanced personalization, ethical AI development, and autonomous decision-making are among the promises that fuel our aspirations for a future where intelligent systems work harmoniously with human intuition, enriching our lives and contributing to societal progress.

As we navigate through the challenges and future prospects of intelligent decision-making, it is essential to recognize that this journey is a collaborative endeavour. Researchers, practitioners, policymakers, and society as a whole play pivotal roles in shaping the trajectory of intelligent decision-making. Through an exploration of the challenges we face today and the possibilities that lie ahead, this chapter aims to contribute to the ongoing dialogue surrounding the responsible and impactful integration of intelligent decision-making in our rapidly evolving world.

1.1 Challenges for Intelligent Decision Making

Intelligent decision-making, often facilitated by artificial intelligence (AI) and machine learning (ML) systems, presents various challenges that need careful consideration. Here are some of the key challenges associated with intelligent decision-making:

1.1.1 Data Quality and Bias

Intelligent decision-making vigorously depends on the nature of the information it processes. Challenges emerge when the information utilised for preparing is one-sided or deficient, prompting choices that sustain or enhance existing inclinations.

Potential Solutions:

Rigorous data preprocessing and cleaning.



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Continuous monitoring and audits of training data to identify and rectify biases.
Implementing fairness-aware algorithms to mitigate discriminatory outcomes
(Liebchen, G. A, 2010).

1.1.2 Interpretability and Explainability

As intelligent decision-making models become more complicated, understanding their choice cycles becomes testing. Absence of straightforwardness might disintegrate trust in these frameworks.

Potential Solutions:

Development of explainable AI models.

Incorporation of transparency mechanisms in decision-making processes.

Education and awareness programs to enhance understanding of model outputs
(Gade, Krishna and Geyik, Sahin Cem and Kenthapadi, Krishnaram and Mithal, Varun and Taly, Ankur, 2019).

1.1.3 Ethical Considerations

Automated decision-making may accidentally prompt moral quandaries, like segregation or protection infringement. Laying out moral rules and systems is fundamental to explore these difficulties.

Potential Solutions:

Adherence to ethical guidelines in model development.

Regular ethical assessments and audits of decision-making systems.

Inclusion of diverse perspectives in the design and evaluation processes (Smuha, N, 2019).

1.1.4 Adaptability to Change

Intelligent systems might battle to adjust to new conditions or unanticipated occasions, possibly coming about in poor choices. The absence of versatility represents a critical test.

Potential Solutions:

Implementation of adaptive algorithms that allow continuous learning.

Regular updates and retraining of models to keep them relevant.

Integration of human feedback to enhance adaptability (Gligorea, I., Cioca, M., Oancea, R., Gorski, A. T., Gorski, H., & Tudorache, P, 2023).



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1.1.5 Security Concerns

Intelligent decision-making systems are helpless to different security dangers, including ill-disposed assaults. Defending these situation from vindictive control is significant.

Potential Solutions:

Implementation of robust security measures, such as encryption.

Regular security audits to identify and address vulnerabilities.

Adversarial training to enhance the system's resilience against attacks (Abdalla, M., Bellare, M., & Neven, G, 2010).

1.1.6 Resource Requirements

Conveying and keeping intelligent decision-making systems frequently request significant computational assets, which might present difficulties for more modest associations with restricted assets.

Potential Solutions:

Utilisation of edge computing and cloud services to alleviate resource constraints.

Exploration of resource-efficient algorithms without compromising accuracy (Yu, W., Liang, F., He, X., Hatcher, W. G., Lu, C., Lin, J., & Yang, X, 2017).

1.1.7 Human-Machine Collaboration

Adjusting the jobs of AI systems and human decision-makers is urgent. Over dependence on computerization or an absence of confidence in the capacities of clever frameworks can obstruct compelling cooperation.

Potential Solutions:

Fostering a collaborative approach where AI supports human decision-making.

Clear delineation of responsibilities between AI and human decision-makers.

Continuous training and education on the capabilities and limitations of intelligent systems (Jarrahi, M. H, 2018).

2. FUTURE PROSPECTS OF INTELLIGENT DECISION MAKING

Intelligent decision-making, empowered by artificial intelligence (AI) and machine learning (ML), continues to evolve at an unprecedented pace, promising transformative impacts on various facets of our lives. As we peer into the future, several exciting prospects emerge, shaping a landscape where intelligent systems become even more integral to our decision-making processes.



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2.1 Augmented Intelligence: A Symphony of Human and Machine

Envision an existence where machines handle the truly difficult work of information investigation and complex estimations, while people give the indispensable flash of instinct, moral judgement, and inventive critical thinking. This cooperative methodology, where artificial intelligence “expands” human knowledge, isn’t simply sci-fi; it’s the eventual fate of IDM. By utilising the special qualities of the two people and machines, we can take care of issues recently considered unsolvable, as:

Optimising climate change mitigation strategies: IDM can investigate immense datasets on natural boundaries, energy utilisation, and monetary variables to create information driven answers for progressing to practical energy sources.

Personalising healthcare interventions: Artificial intelligence can examine individual clinical records, hereditary information, and way of life elements to anticipate wellbeing dangers and design customised treatment plans for every patient (Sadiku, M. N., Musa, S. M., Sadiku, M. N., & Musa, S. M., 2021).

Designing smart cities: IDM can investigate traffic designs, asset utilization, and resident criticism to streamline metropolitan framework, transportation frameworks, and energy lattices, prompting more productive and decent urban communities.

2.2 Democratisation of Insights: Powering Informed Choices for All

Currently, access to data and the ability to derive meaningful insights remains concentrated in the hands of a few. IDM has the potential to democratise this power, making data-driven decision-making accessible to everyone. This could lead to:

Empowered citizens: People can dissect information on neighbourhood issues like crime percentages, medical care offices, and instructive chances to advocate for positive change in their networks (Beneicke, J., Juan, A. A., Xhafa, F., Lopez-Lopez, D., & Freixes, A., 2019).

Informed consumers: Customised suggestion frameworks fueled by artificial intelligence can assist buyers with settling on informed decisions about everything from medical services plans to monetary ventures.

Effective social programs: State run administrations and NGOs can use IDM to target asset portion and strategy intercessions in view of continuous information on neediness, craving, and social disparity.



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2.3 Personalization Revolution: Tailoring Solutions to Individual Needs

One-size-fits-all arrangements are turning into a remnant of the past. IDM permits us to move towards a time of customized intercessions and encounters, taking special care of the extraordinary requirements and inclinations of every person. This could upset fields like:

Education: Man-made intelligence controlled versatile learning stages can customize learning directions for every understudy, enhancing their instructive experience and amplifying their true capacity.

Healthcare: Accuracy medication, driven by IDM, can tailor treatment plans and medicine measurements in view of individual hereditary profiles and organic reactions.

Creative industries: Simulated intelligence can customize creative encounters, from prescribing music and films to producing custom fine arts in light of your taste and inclinations.

2.4 Global Problem-Solving: Harnessing Collective Intelligence for a Sustainable Future

The issues we face today, from environmental change and pandemics to social imbalance and financial flimsiness, are complicated and interconnected. IDM offers an incredible asset for handling these difficulties by:

Simulating global systems: Computer based intelligence models can mimic the interaction of perplexing variables like environment, financial aspects, and human way of behaving, permitting us to test different approach mediations and foresee their results.

Optimising resource allocation: IDM can break down information on asset utilisation, framework, and populace needs to improve asset distribution and forestall squander, advancing practical turn of events.

Facilitating global collaboration: Computer based intelligence controlled stages can work with correspondence and cooperation between specialists, policymakers, and partners across borders, prompting more compelling answers for worldwide difficulties.

2.5 Enhanced Personalization

Types of progress in shrewd elements will engage more tweaked and setting careful recommendations, provoking a more uniquely designed client experience in various spaces, including electronic business, clinical consideration, and preparing.



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Challenges and Future Prospects of Intelligent Decision Making

2.6 Integration of Multi-Modal Data

Future astute frameworks will probably incorporate data from different sources, including text, pictures, and sound, to go with additional educated and exhaustive choices. This multi-modular reconciliation will improve the extravagance of information inputs (Poria, S., Cambria, E., Hussain, A., & Huang, G. B, 2015).

2.7 Autonomous Decision-Making

With progressions in support learning and independent frameworks, there is a potential for savvy dynamic frameworks to work independently in powerful conditions, like self-driving vehicles and shrewd urban communities (Czubenko, M., Kowalczyk, Z., & Ordys, A, 2015).

2.8 Ethical AI Development

The future will observe a more grounded accentuation on moral artificial intelligence improvement, with associations and specialists focusing on decency, straightforwardness, and responsibility in the plan and organisation of smart dynamic frameworks (Smuha, N, 2019).

2.9 Human-Augmented Intelligence

A cooperative model where simulated intelligence frameworks increase human dynamic capacities will acquire conspicuousness. This approach uses the qualities of both computer based intelligence and human instinct, prompting more compelling and moral dynamic cycles (Mruthyunjaya, V., & Jankowski, C, 2020).

2.10 Continuous Learning and Adaptation

Smart frameworks will advance to turn out to be more versatile, constantly gaining from new information and client connections. This will upgrade their capacity to deal with changing circumstances and rising designs really (Bachinger, F., Kronberger, G., & Affenzeller, M, 2021).

2.11 Quantum Computing Impact

As quantum processing develops, it can possibly alter wise dynamics by fundamentally expanding computational power. This could prompt the improvement of additional refined models and calculations (Aithal, P. S, 2023).



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3. CONCLUSION

The challenges and future prospects of intelligent decision-making are intertwined, reflecting the dynamic nature of this field. Addressing current challenges requires a collaborative effort from researchers, developers, policymakers, and society at large. As we navigate these challenges, the future holds exciting possibilities for the evolution of intelligent decision-making, promising more ethical, adaptable, and personalised systems that positively impact various aspects of our lives.

REFERENCES

- Abdalla, M., Bellare, M., & Neven, G. (2010). Robust encryption. *Theory of Cryptography: 7th Theory of Cryptography Conference, TCC 2010, Zurich, Switzerland, February 9-11, 2010 Proceedings*, 7, 480–497.
- Aithal, P. S. (2023). Advances and new research opportunities in quantum computing technology by integrating it with other ICT underlying technologies. *International Journal of Case Studies in Business, IT and Education*, 7(3), 314–358.
- Bachinger, F., Kronberger, G., & Affenzeller, M. (2021). Continuous improvement and adaptation of predictive models in smart manufacturing and model management. *IET Collaborative Intelligent Manufacturing*, 3(1), 48–63. doi:10.1049/cim2.12009
- Bender, E. M., & Friedman, B. (2018). Data statements for natural language processing: Toward mitigating system bias and enabling better science. *Transactions of the Association for Computational Linguistics*, 6, 587–604. doi:10.1162/tacl_a_00041
- Beneicke, J., Juan, A. A., Xhafa, F., Lopez-Lopez, D., & Freixes, A. (2019). Empowering citizens' cognition and decision making in smart sustainable cities. *IEEE Consumer Electronics Magazine*, 9(1), 102–108. doi:10.1109/MCE.2019.2941457
- Bostrom, N. (2014). *Superintelligence: Paths, Dangers, Strategies*.
- Czubenko, M., Kowalczyk, Z., & Ordys, A. (2015). Autonomous driver based on an intelligent system of decision-making. *Cognitive Computation*, 7(5), 569–581. doi:10.1007/s12559-015-9320-5 PMID:26380583
- Diakopoulos, N. (2016). Accountability in algorithmic decision making. *Communications of the ACM*, 59(2), 56–62. doi:10.1145/2844110
- Doshi-Velez, F., & Kim, B. (2017). Towards a rigorous science of interpretable machine learning. arXiv preprint arXiv:1702.08608.



Challenges and Future Prospects of Intelligent Decision Making

- Gade, K., Geyik, S. C., Kenthapadi, K., Mithal, V., & Taly, A. (2019, July). Explainable AI in industry. In *Proceedings of the 25th ACM SIGKDD international conference on knowledge discovery & data mining* (pp. 3203-3204). 10.1145/3292500.3332281
- Gligorea, I., Cioca, M., Oancea, R., Gorski, A. T., Gorski, H., & Tudorache, P. (2023). Adaptive Learning Using Artificial Intelligence in e-Learning: A Literature Review. *Education Sciences*, 13(12), 1216. doi:10.3390/educsci13121216
- Gupta, J. N., Forgionne, G. A., & Mora, M. (Eds.). (2007). *Intelligent decision-making support systems: Foundations, applications and challenges*. Academic Press.
- Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. *Business Horizons*, 61(4), 577–586. doi:10.1016/j.bushor.2018.03.007
- Liebchen, G. A. (2010). *Data cleaning techniques for software engineering data sets* (Doctoral dissertation, Brunel University, School of Information Systems, Computing and Mathematics).
- Mruthyunjaya, V., & Jankowski, C. (2020). Human-Augmented robotic intelligence (HARI) for human-robot interaction. In *Proceedings of the Future Technologies Conference (FTC) 2019: Volume 2* (pp. 204-223). Springer International Publishing.
- Phillips-Wren, G., & Ichalkaranje, N. (Eds.). (2008). *Intelligent decision making: An AI-based approach* (Vol. 97). Springer Science & Business Media. doi:10.1007/978-3-540-76829-6
- Poria, S., Cambria, E., Hussain, A., & Huang, G. B. (2015). Towards an intelligent framework for multimodal affective data analysis. *Neural Networks*, 63, 104–116. doi:10.1016/j.neunet.2014.10.005 PMID:25523041
- Rudin, C. (2019). Stop explaining black box machine learning models for high stakes decisions and use interpretable models instead. *Nature Machine Intelligence*, 1(5), 206–215. doi:10.1038/s42256-019-0048-x PMID:35603010
- Russell, S. J., & Norvig, P. (2010). *Artificial intelligence a modern approach*. Academic Press.
- Sadiku, M. N., Musa, S. M., Sadiku, M. N., & Musa, S. M. (2021). Augmented intelligence. *A Primer on Multiple Intelligences*, 191-199.
- Smuha, N. (2019). The EU Approach to Ethics Guidelines for Trustworthy Artificial Intelligence. *Computer Law Review International*, 20(4), 97–106. doi:10.9785/cri-2019-200402



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Challenges and Future Prospects of Intelligent Decision Making

Sutton, R. S., & Barto, A. G. (2018). *Reinforcement learning: An introduction*. MIT press.

Whittaker, M., Crawford, K., Dobbe, R., Fried, G., Kaziunas, E., Mathur, V., & Schwartz, O. (2018). *AI now report 2018*. AI Now Institute at New York University.

Yu, W., Liang, F., He, X., Hatcher, W. G., Lu, C., Lin, J., & Yang, X. (2017). A survey on the edge computing for the Internet of Things. *IEEE Access : Practical Innovations, Open Solutions*, 6, 6900–6919. doi:10.1109/ACCESS.2017.2778504



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THE MOST EFFECTIVE SOCIAL MEDIA TECHNIQUES TO INCREASE
CUSTOMER ENGAGEMENT

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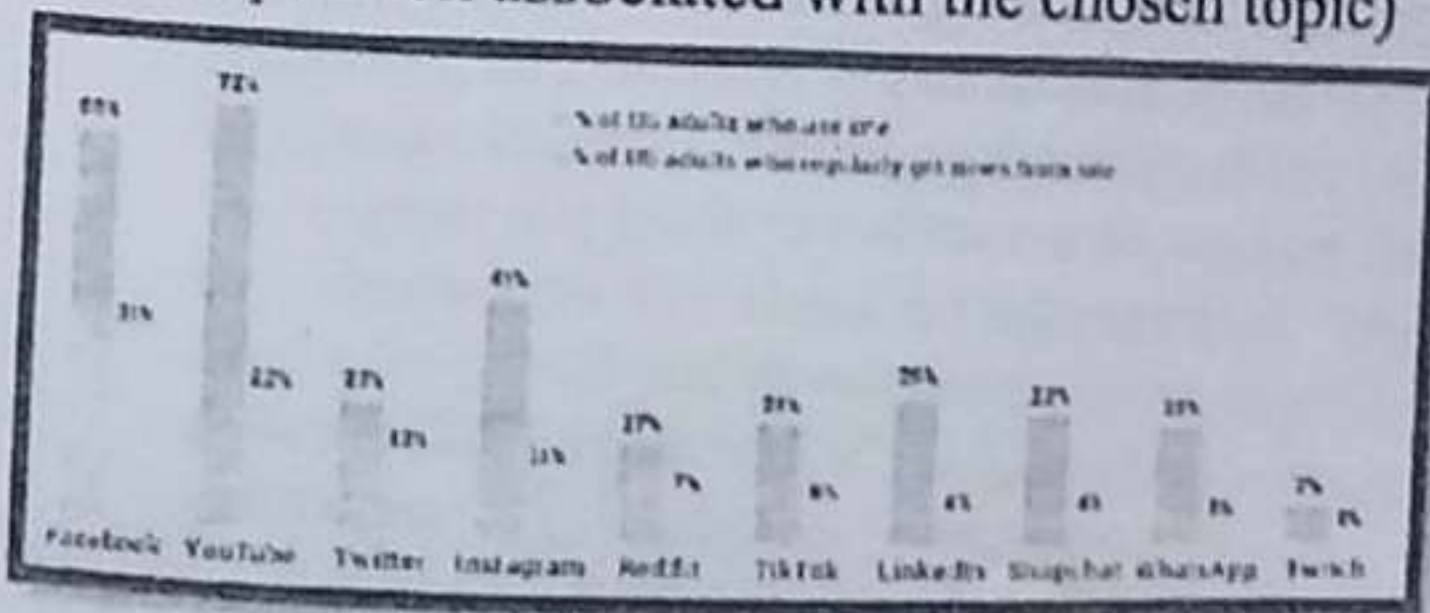
Abstract

There are various social media effective strategies that assist to enhance customer engagement levels by incorporating different technological tools and digital applications. The introduction of effective marketing tools helps to improve cost-effectiveness and provide business organizations to obtain their targeted goals. In research study; primary quantitative reach methodology will be taken into consideration and will be performed by the survey analysis of 75 respondents by conducting 10 questions. Moreover proper SPSS analysis will be conducted in order to gather authentic and reliable key data with the implication of survey analysis. Therefore, it can be concluded that by introducing different innovative an effective technological tool helps to increase the customer engagement level.

Keywords: Social media, social media techniques, customer engagement levels, customer behavior, social media platforms, social media applications, etc.

1. INTRODUCTION

Introduction: The implementation of the most effective social media techniques is adopted by most business organizations as the utilization of digital technology and associated tools are emerging day by day (Liu, et al. 2020). In order to enhance customer engagement levels, all the social media tactics will be determined to analyze the significance of the research object and also to justify the research question associated with the chosen topic)



This Figure Impact of social media on the customer engagement taken from: Influenced by Kaur, et al. 2020 .This e graph shows the statistical data on the impact of effective social media on customer engagement levels, as it helps to enhance the direct communication between business developers and their customers resulting in more productivity and profitability

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for the success of business organizations (de Oliveira Santini, *et al.* 2020). There are different social media innovative strategies that help to enhance customer engagement levels by introducing different technological tools and digital applications. The implementation of effective marketing tools helps to enhance cost-effectiveness and provide business organizations to achieve their targeted goals (Hoyer, *et al.* 2020).

Research aim and objective

The aim of the research study is to highlight The Most Effective Social Media Techniques that help to boost Customer Engagement levels. The significant research objective is as follows,

RO1: To understand different social media technologies

RO2: To estimate the factors that is impacting the customer engagement levels

RO3: To determine the relation between social media and customer engagement levels

RO4: To identify the measures that is used to develop effective social media technology

2. LITERATURE REVIEW

In this section, the key significant factors and information will be determined and highlighted properly. Along with this, there is a depth analysis of the existing literature review that will be discussing the relevance of the study in the existing literature by analyzing relevant theories.

Effective Social Media Techniques

In the contemporary digitally advance world, most of the business industries are tending to adopt different technological tools and applications in order to increase the productivity and profitability by improve the customer engagement levels (Rather, 2021). In addition to this business industries are adopting new and innovative social media techniques to boost the performance levels (Moran, *et al.* 2020). The implementation of effective social media techniques and tactics not only boost the customer engagement; however it also helps to improve the purchasing experience and customer loyalty (Poitras, *et al.* 2020). Furthermore, the techniques include the development of high quality post and promotional ads on different social media platforms like Face book and Instagram (Meire, *et al.* 2019). Along with this, the introduction of social media techniques also improves the transparency of the business, which results in gaining customers trust and engagement.

Customer Engagement levels

Customer engagement highlights the interconnection between the company and the customers without considering the transactional point of view. The concept helps to provide the companies and business organizations to develop strong relationship to enhance the customer satisfaction levels by improving the trust of the customers towards the company (Li & Xie, 2020). The engagement levels of customers depend on their perception about the company based on what they observe and hear about the organization. The concept of customer engagement plays a huge role in the growth and development of an organization by achieving the targeted goals (Liu Shin & Burns 2021). Moreover, it's helps to boost the returns on investment, and results in more revenue generation.





Relation between social media platforms and customer engagement

There is a strong interconnection between effective social media platforms and customer engagement levels. It helps to enhance the connection with the customers, increases the retention rates by boosting the loyalty of the customers (Li, *et al.* 2020). The implementation of effective social media techniques helps to reveal the new opportunities to increase the sales rate by increasing the purchasing rates. Social media effective technologies and techniques help to enhance the transparency of the company by displacing the key information about the products of the company by different social media post and advertisements (Li, *et al.* 2021). There are different strategies that help to improve the customer engagement levels such as the identification of customers need and estimating the feedbacks.

Impact of innovative social media techniques on customer engagement levels

Innovative and effective social media techniques help to boost the customer engagement levels by implementing different tactics. Moreover the effective techniques are adopted by different social media platforms to increase the efficiency and productivity within a short period of time (Hoyer, *et al.* 2020). Social media platforms like Face book and Instagram are developing innovative techniques by the help of incorporation of strategic plans like establishment of innovative and attractive high quality posts to increase the customer trust and loyalty as it helps to boost the transparency of the business products (Kaur, *et al.* 2020). Moreover, effective social media techniques like content creation assist to build a strong brand reputation globally.

Theoretical implication

Consumer behavior theory

In order to understand the customer's engagement levels towards an organization, and to identify the factors associated with the concept, reliable and relevant theory that helps to support the research question is required to be analyzed properly (Eisingerich, *et al.* 2019). Moreover, to develop the concept on of the renowned theories is the customer behavior theory as this theory properly supports to understand the significant impact of social media techniques on the customer behavior . The theory mainly focuses on the significant elements of *consumer's behavior* that how they establish *quick decision making* (Gonçalves, *et al.* 2023). The theory also sheds the light on the different significant factors associated with the customer engagement levels. The theory helps to showcase psychological factors which consist of vital elements such as the *customer's attitude*, *background* and *customer' perception* as it helps in boosting the customer enjoyments levels (Hollebeck, 2019).

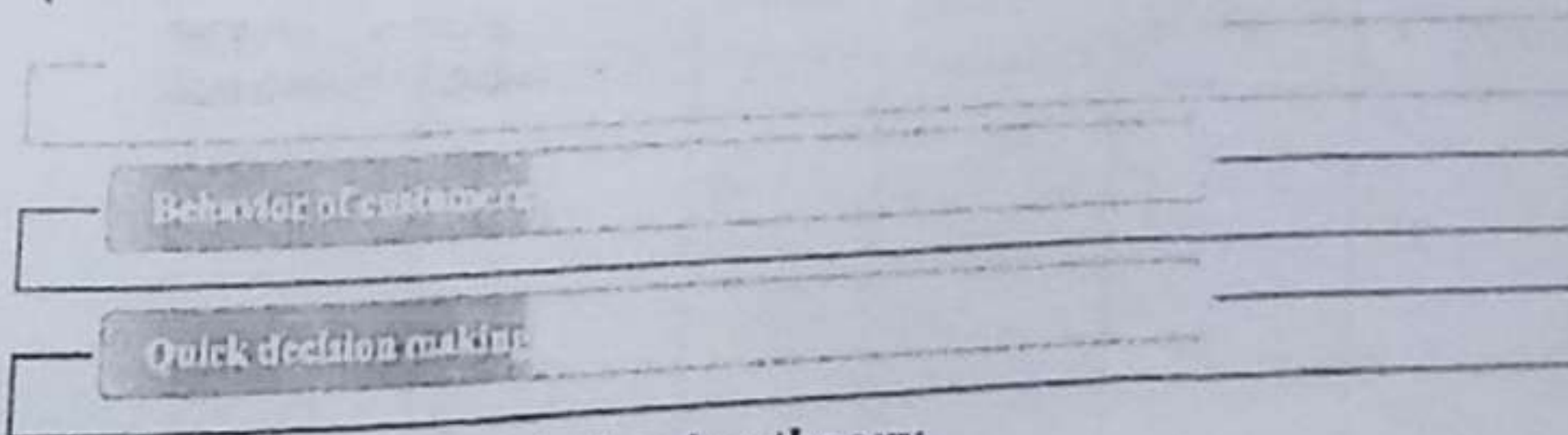


Figure 2: Consumer behavior theory
(Source: Influenced by Dolan, *et al.* 2020)



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3. METHODOLOGY

This chapter highlights effective research methodology and procedures in order to conduct they research study. The chapter will consist of the presentation of the suitable approaches for data collection and research methodology. In research study, primary quantitative reach methodology will be taken into consideration and will be performed by the survey analysis of 75 respondents by conducting 10 questions. Moreover proper SSPS analysis will be performed in order to obtain authentic and reliable key data with the implication of survey analysis (Rather, 2021). The proper analysis will be performed to determine the impact of effective social media techniques and its associated social media platforms on the customer engagements levels (de Oliveira Santini, et al. 2020). Therefore, primary quantitative research methodology will be determined to improve the future implication of the research study.

4. Findings

4.1 Demographic dat

	Frequency	Percent
Female	32	42.7
Male	36	48.0
Valid Prefer not to say	7	9.3
Total	75	100.0

4.1.1 Gender

According to the above-developed table survey responses gathered for the male participants is about 48%, for female candidates the responses collected are 42.7%, and in the last 9.3% participants choose the option of not to say. The highest number of responses is collected for the participants who belong to Male group and the other minimum number of responses is gathered for the candidates belonging to prefer not to say the group.

4.1.2 Age group

	Above 50 Years	Below 25 years	Between 20 to 25 years	Between 25 to 30 years	Between 26 and 37 years	Between 35 to 40 years	Between 38 and 50 years	Total
Frequency	6	6	2	7	21	4	29	75
Percent	8	8	2.7	9.3	28	5.3	38.7	100





DV	75	3.00	15.00	663.00	8,8400	3,18,374	10.136	113	277	799	548
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The term descriptive data analysis refers to the process which is involved in analyzing the numerical data that is collected from the responses of the survey participants (Griffith, 2019). The standard deviation value obtained is about 4.02.

4.3 Multiple regressions

Model Summary									
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Change Statistics				
					R Change	Square Change	F Change	df1	df2
1	.935 ^a	.874	.873	1.13562	.874	508.621	1	73	.000

The R square value is help to detect the proportion of the variances that are present in the research study (Hilorme *et al.* 2019). The obtained R square value is 0.874.

ANOVA^a

Model		Sum Squares	df	Mean Square	F	Sig.
1	Regression	655.937	1	655.937	508.621	.000 ^b
	Residual	94.143	73	1.290		
	Total	750.080	74			

Table 4.3.2: ANOVA

ANOVA is used in order to develop a comparison between different variances of the statistical numerical data (Ji *et al.* 2021). The Sig value that is obtained from the above table is 0.000.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	264	.402		.656	.514
	IV	.739	.033	.935	22.553	.000

The coefficient helps to detect the value that is obtained by multiplying a number with the variables (Kou *et al.* 2019). The obtained value ranges from 0.656 to 22.5.



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5. CONCLUSION

Therefore, it can be concluded that by introducing different innovative an effective technological tool helps to increase the customer engagement level. As the social media platform more number of customers at the same time. Moreover, analyzing the relationship between the social media and customer engagement it has been observed that it also helps to increase the number of customers. Furthermore it helps to increase the visibility of the product, hence result in increasing the customer engagement levels.

REFERENCES

- de Oliveira Santini, F., Ladeira, W. J., Pinto, D. C., Herter, M. M., Sampaio, C. H., & Babin, B. J. (2020). Customer engagement in social media: a framework and meta-analysis. *Journal of the Academy of Marketing Science*, 48, 1211-1228. Retrieved from: <https://link.springer.com/article/10.1007/s11747-020-00731-5> [Retrieved on 22nd February 2023]
- Dolan, R., Conduit, J., Frethey-Bentham, C., Fahy, J., & Goodman, S. (2019). Social media engagement behavior: A framework for engaging customers through social media content. *European Journal of Marketing*, 53(10), 2213-2243. Retrieved from : https://www.emerald.com/insight/content/doi/10.1108/EJM-03-2017-0182_S0167811619300205 [Retrieved on 22nd February 2023]
- Eisingerich, A. B., Marchand, A., Fritze, M. P., & Dong, L. (2019). Hook vs. hope: How to enhance customer engagement through gamification. *International Journal of Research in Marketing*, 36(2), 200-215. Retrieved from : <https://www.sciencedirect.com/science/article/pii/S0167811619300205> [Retrieved on 22nd February 2023]
- ing strategy: definition, conceptualization, taxonomy, validation, and future agenda. *Journal of the Academy of Marketing Science*, 49, 51-70. Retrieved from : <https://link.springer.com/article/10.1007/s11747-020-00733-3> [Retrieved on 22nd February 2023]
- Li, M. W., Teng, H. Y., & Chen, C. Y. (2020). Unlocking the customer engagement-brand loyalty relationship in tourism social media: The roles of brand attachment and customer trust. *Journal of Hospitality and Tourism Management*, 44, 184-192. Retrieved from : <https://journals.sagepub.com/doi/pdf/10.1177/0022242919873903> [Retrieved on 22nd February 2023]



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INFLUENCE OF BRAND REPUTATION ON CUSTOMER FIRST IMPRESSION

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ABSTRACT

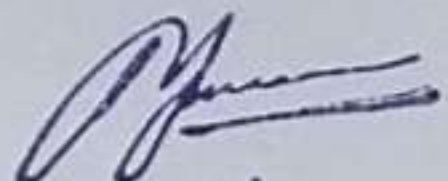
The aim of this research study is to understand the impact of brand awareness on brand implication. Therefore, the relationship between the customer's first impression and brand image is explained in this research study. Thematic analysis is allowed to be developed in this research section. Moreover, the literature review portion helps to analyze the impact of the brand image on economic development. Researchers are using primary quantitative analysis in this research portion. Moreover, survey analysis is developed, and researchers are capable to analyse collected information with the support of the SPSS software. Overall discussion about the research topic is being highlighted. On the other hand, research objectives take place in this section.

KEYWORDS: Brand reputation, Customer satisfaction level, customer engagement level, customer impression, brand value

INTRODUCTION

The reputation of a brand is the thinking or perception the customers, partners, and employees have for a brand. According to Foroudi (2019), the performance of a company or its product is the key factor that affects the reputation of that brand. The first impression of the company or its product has to be convincing and customer-satisfying in order to get positive feedback. The feedback from the customers is what matters the most for any brand to build up a nice first impression on customers. As reported by Kim *et al.* (2020), a brand with a strong reputation in the market attracts more consumers to itself by winning their trust. The positive response from consumers helps a brand to grow at an extremely fast rate as the consumers also advertise and talk about the brand or the product. In accord with Zervas *et al.* (2021), there is a necessary need of listening to the feedback of the customers, both positive as well as negative reviews in order to understand the demand and requirements of the consumer. This step can help in improving the product according to the needs of the customer leading to more profits and building a better reputation of the brand.




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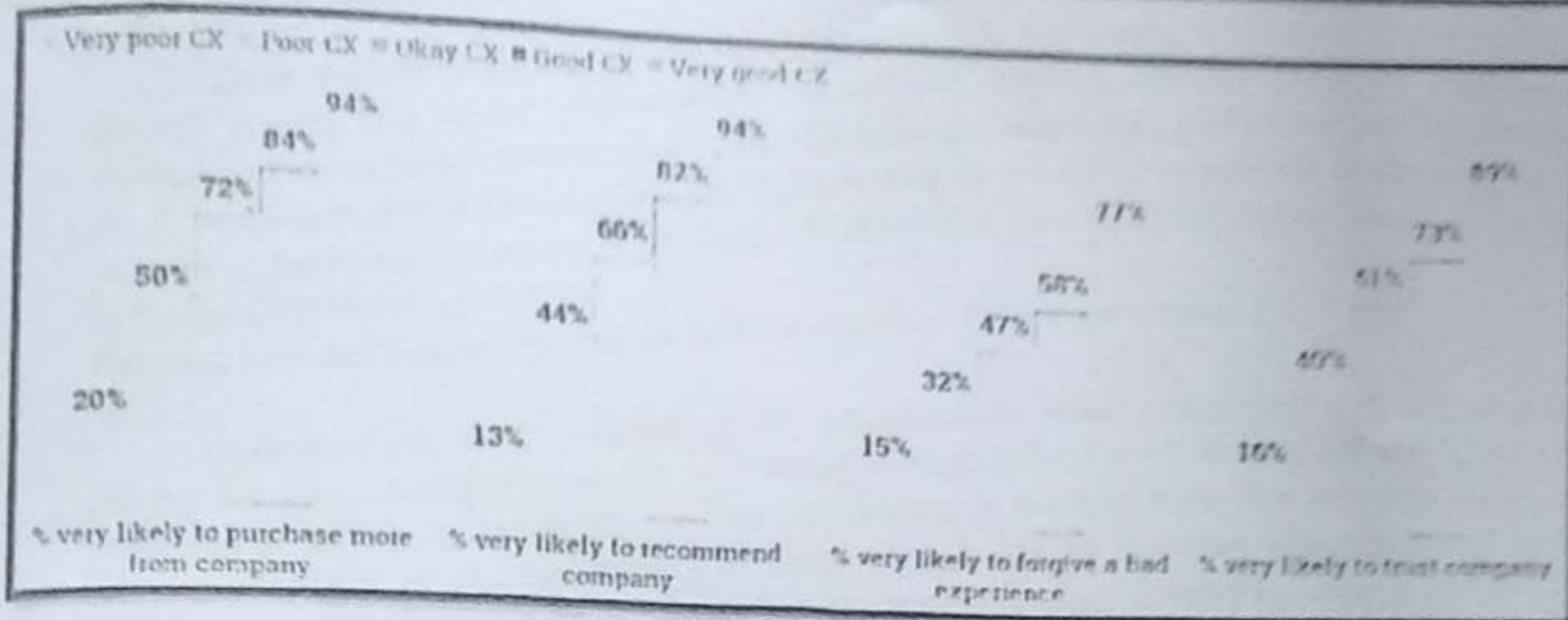


Figure 1: Consumers' brand information and their trust
(Source: Chang *et al.* 2019)

Research Aim and Objectives

The aim of this research is to give a brief description of the influence of branding reputation, the factors affecting it, and the challenges one faces during branding.

- To analyze the importance of first impression of a brand the customer
- To scrutinize the factors influencing the reputation of a brand
- To survey the effects of the negative impression of a brand on customer
- To investigate the challenges in brand reputation

LITERATURE REVIEW

Influencing factors of brand reputation

Brand reputation refers to the concept where customers have a perception of an organisation before making a purchase. As per the opinion of Allevi *et al.* (2019), brand reputation integrates customer loyalty and trust that improve brand value in the competitive marketplace. Brand awareness is connected with a brand reputation that drives bottom-line growth. The brand reputation can be measured with the help of customers' engagement level with the brand (Naqvi *et al.* 2020).

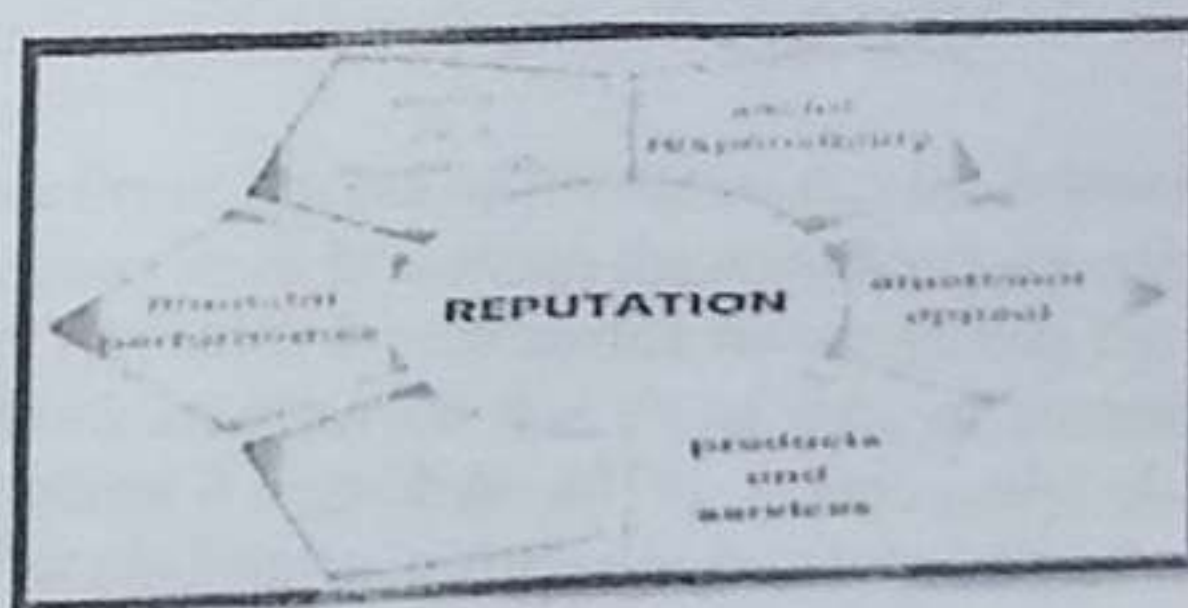


Figure 2: Factors of brand reputation (Source: Influenced by Anadu *et al.* 2020)





From the above figure, it can be evaluated that the brand reputation depended on various factors like social responsibility, emotional appeal, offered products and services, workplace environment, customer services, financial performance, and vision and leadership. As per the statement of Ben-David *et al.* (2022), speeding up the delivery process of the services helps to improve the brand reputation. It has been observed that having excellent customer service helps to improve the brand reputation.

Relation between brand reputation and customers' first impression

Customers are the key factor of the organization since consumers are responsible for driving the sales. Acceptance of the customers is highlighted with the aid of the brand image (Anadu *et al.* 2020). Additionally, the first impression is the key term that helps to improve the economical aspect of the business. Customer trust helps to develop organizational growth; therefore, a positive working environment has arrived. Customer loyalty is being highlighted and it tries to develop the organizational culture. The quality of the brand is based on the elimination of the acceptance of the customers (Döttling & Kim, 2022). Additionally, the effectiveness of the development structure of the organization is developed.

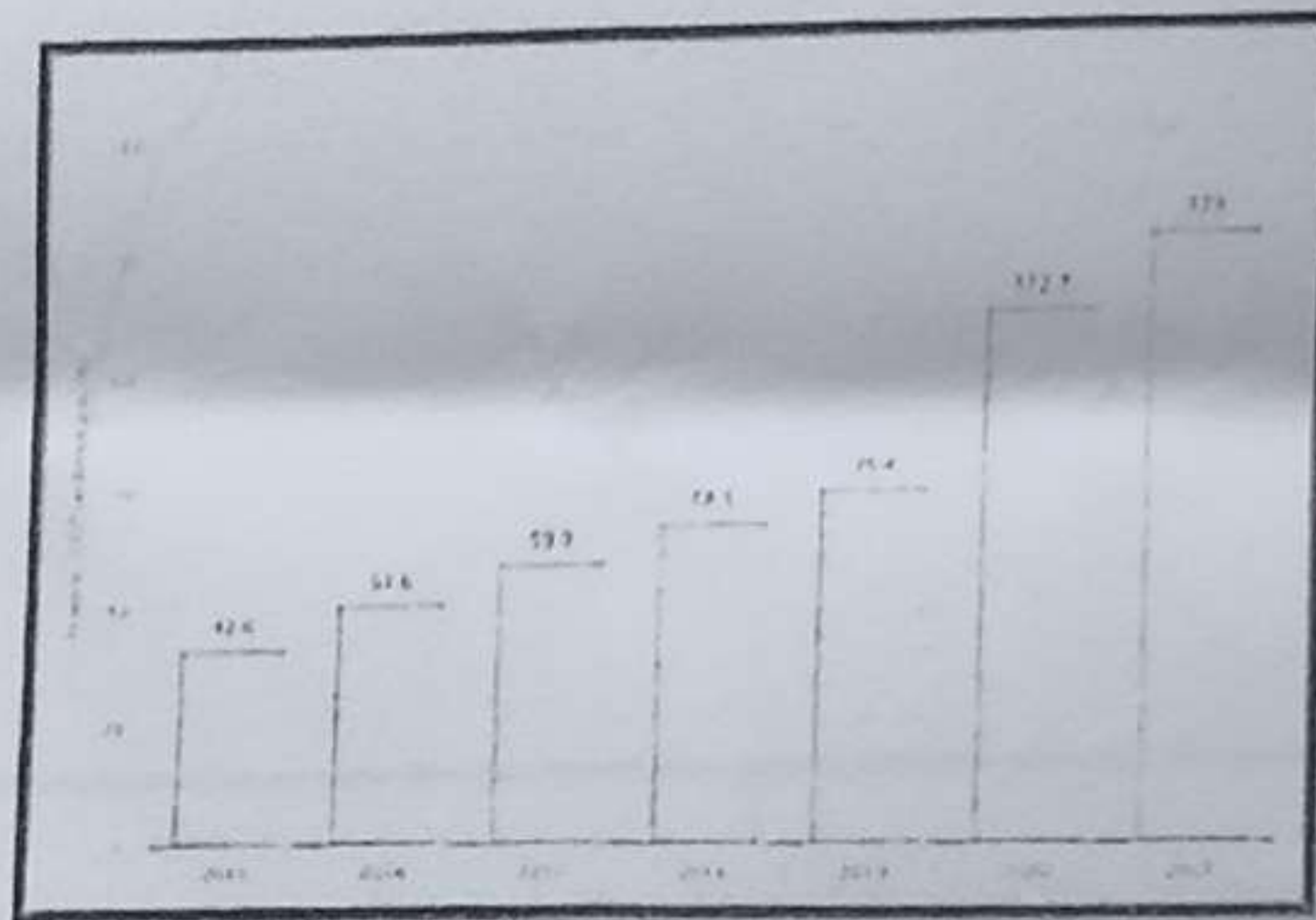


Figure 3: Increasing rate of revenue by increasing brand reputation

(Source: Statista, 2023)

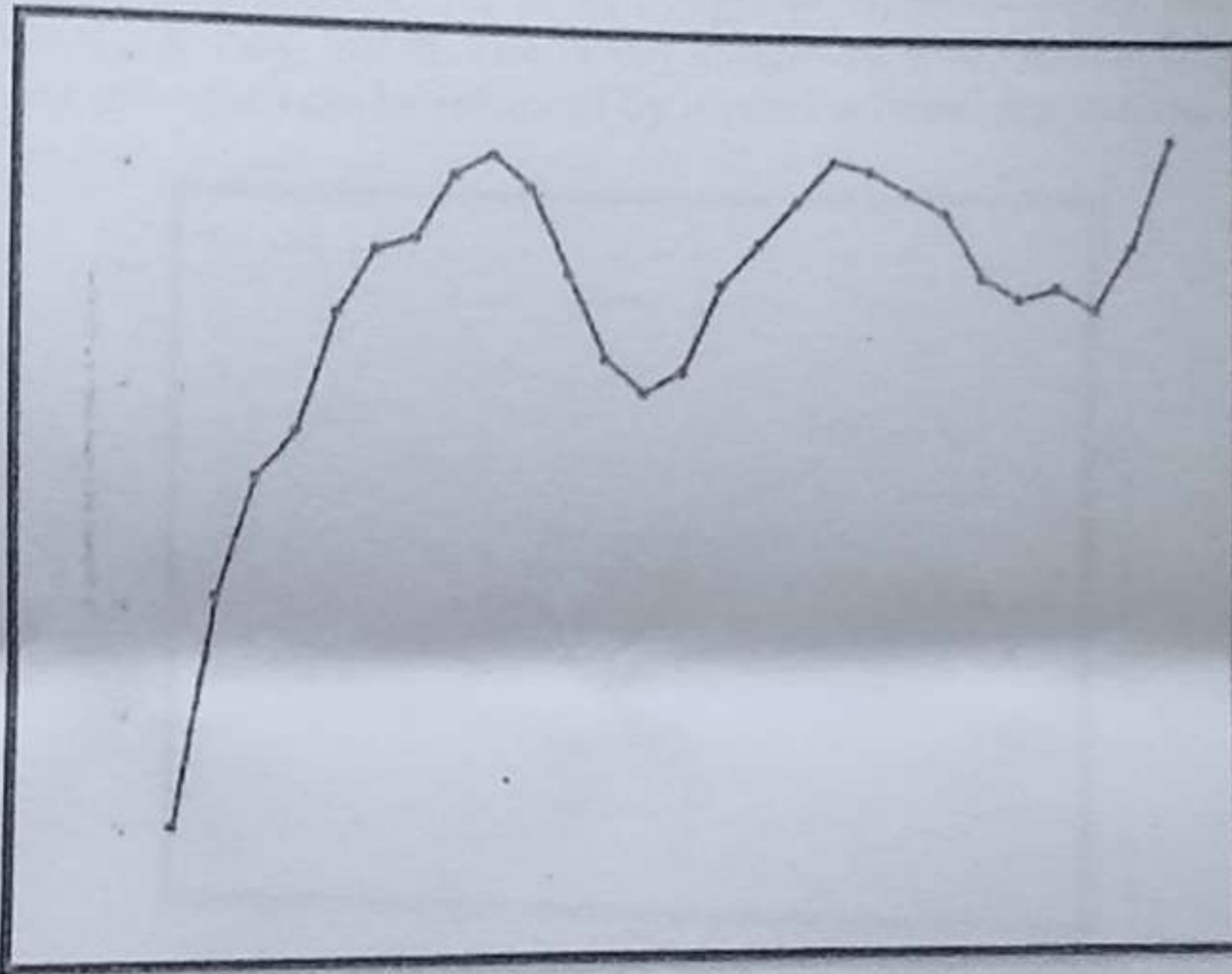
From the above figure 3, it can be illustrated that the improvement in customer satisfaction levels and brand reputation helps to increase the company's revenue. It has been recorded that the enhancement of brand reputation is responsible for increasing the revenue by 15% at the end of 2022 from 2015. It has been observed that about 90% of customers are not frequently brands having negative reputations (Galagedera, 2019). Additionally, about 87% of customers reverse purchasing process after receiving negative comments about the brand.





Challenges associated with brand reputation

Treating brands is the main challenge that is associated with brand implication. New subcategories of the business are allowed to be developed and it helps to create new business ideas (Griffith, 2019). The trust of the customers is allowed to be developed and it tries to increase the financial aspect of the business. Lack of digital strategy is the issue that has to be highlighted within the sectors; therefore, the morale and trust of the employees are disrupted. Brand relevance is another challenge that is highlighted in the business sector and it eliminates the growth of the business (Hilorme *et al.* 2019). Brand awareness and brand image are the two factors that eliminate the development of the brand.



● Figure 4: Increasing rate of brand reputation by enhancing the customer satisfaction level

(Source: Statista, 2023)

From above table 4, it can be stated that the customer satisfaction level is deeply connected with organization's profit margin. According to the figure, the improvement of customer engagement level drives companies' sales. The customer satisfaction level has increased by 78.41% over a decade which increases the overall profitability of organization (Galagedera, 2019).

Literature Gap

Less statistical information to analyse the relationship between the consumers' first impression and the brand reputation generates a literature gap. The customer satisfaction level is one of the major factors to improve the brand reputation level (Döttling & Kim, 2022). However, the lack of information on these aspects creates a major literature gap in the study.



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Theoretical Framework

Customer Behavioral Theory

The theory of consumer behavior states that the changes in customers' behavior are based on changing market trends. Consumer behavior highlights the actions and decisions taken by people while purchasing products and services. As per the statement of Krakow & Schäfer (2020), consumer behavior refers to the concept of marketing used by organisations to understand customers' requirements. Analysing consumer behavior involves the product purchasing process from taking initial decisions. It has been observed that the increasing rate of customer purchasing behavior is deeply connected with customer satisfaction levels. It has been recorded that the customer satisfaction level improves the profit margin of organisation by 74% in a competitive marketplace (Ma, L., & Tang, 2019). The theory enlightens that customers' first impression of brands plays a key role which can be enhanced by involving brand reputation.

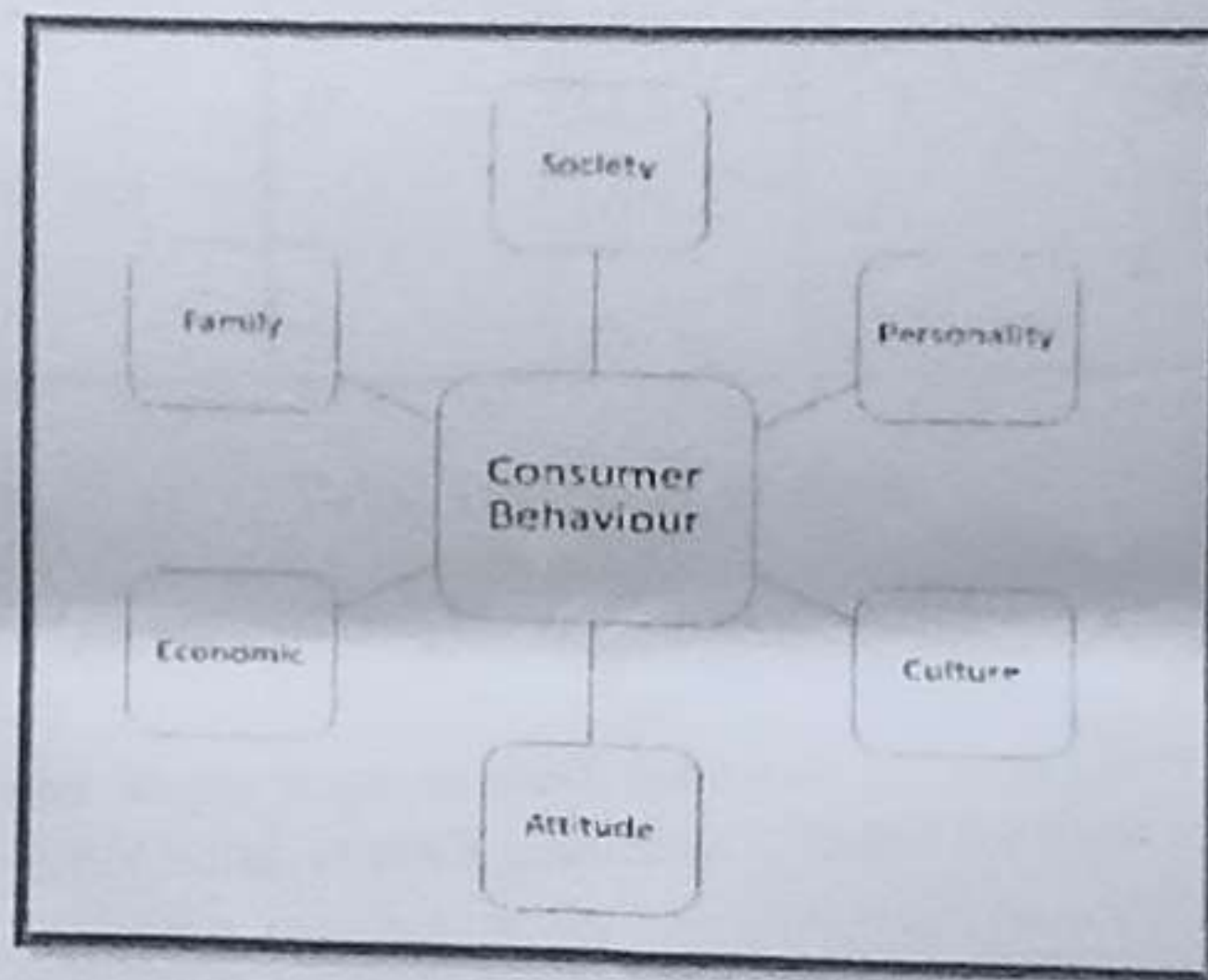


Figure 5: Factors of consumer behavior

(Source: Influenced by Mirza *et al.* 2020)

Figure 2 illustrates that consumer behavior depends on social, cultural, psychological, and economic factors. As per the comment of Ma, Xiao & Zeng (2022), customers are influenced by social factors mostly following cultural aspects. Since customers are responsible to drive sales and improve the profit margin, hence, the customer behavioral theory plays a crucial role in a modern marketing setting. Additionally, the theory assists a business to understand customer demands and develop a business strategy that helps to penetrate into the competitive marketplace.

METHODOLOGY

The method for collecting data that is used in this research is the primary quantitative method. As per Chang *et al.* (2019), the approach used in this research for describing the topic is the descriptive deductive approach. A survey is done for this research in which the opinions of





the seventy-five respondents have been taken under for analysis. From each respondent, ten questions have been asked regarding the reputation of the branding. Statistical Package for the Social Sciences (SPSS) software is used for the statistical data analysis and representation collected from the survey. The tables of SPSS are also included in this research showing the final impact of the branding reputation survey done.

FINDINGS

Demographic analysis

Gender analysis

1. What is your gender?

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	36	48.0	48.0	48.0
Male	31	41.3	41.3	89.3
Valid Prefer not to say	8	10.7	10.7	100.0
Total	75	100.0	100.0	

Table 1: Gender analysis

(Source: SPSS)

The above table shows that 36 participants are female and 31 survey respondents are male out of 100 participants. On the other hand, about 8 audiences selected the third option states to prefer not to say.

The figure illustrates that 48% of participants are female whereas 41% are males who participated in the survey. On the other hand, about 11% of 75 responses show that some people are not interested in disclosing their gender.

Age analysis

2. What is your age group?

	Frequency	Percent	Valid Percent	Cumulative Percent
Above 50 Years	9	12.0	12.0	12.0
Below 25 years	8	10.7	10.7	22.7
Valid Between 26 and 37 years	25	33.3	33.3	56.0
Between 38 and 50 years	33	44.0	44.0	100.0
Total	75	100.0	100.0	

Table 2: Age analysis (Source: SPSS)



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The table evaluates that the number of audiences from the age bracket below 25 years, between 26 and 37 years, between 38 and 50 years, and above 50 years are 8, 25, 33, and 9 respectively.

The figure illustrates that 12%, 11%, 33%, and 44% people from total respondents belong to the age bracket below 25 years, between 26 and 37 years, between 38 and 50 years, and above 50 years respectively.

Annual income analysis

3. What is your annual income level?

	Frequency	Percent	Valid Percent	Cumulative Percent
Above £ 50,000	11	14.7	14.7	14.7
Below £ 30,000	9	12.0	12.0	26.7
Valid Between £ 30,001 and £ 40,000	23	30.7	30.7	57.3
Between £ 40,001 and £ 50,000	32	42.7	42.7	100.0
Total	75	100.0	100.0	

Table 3: Annual income analysis
(Source: SPSS)

The table helps to understand that the frequency of survey participants having an annual income range below £ 30,000, between £ 30,001 and £ 40,000, between £ 40,001 and £ 50,000, and above £ 50,000 are 9, 23, 32, and 11 respectively.

The figure helps to evaluate that people have an annual income range below £ 30,000, between £ 30,001 and £ 40,000, between £ 40,001 and £ 50,000, and above £ 50,000 are 12%, 31%, 42%, and 14% respectively.

Descriptive analysis

The descriptive test is significant for understanding the range and characteristics of gathered numeric information. As per the statement of Ji *et al.* (2021), descriptive analysis is performed to analyze the gathered responses and highlight the concentration of information.

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
IV	75	4.00	20.00	831.00	11.0800	4.27993	18.318	.130	.277
DV	75	3.00	15.00	646.00	8.6133	2.82313	7.970	.240	.277

Table 4: Descriptive test

(Source: SPSS)

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The table shows that 75 responses are gathered from different customers to gain different viewpoints. The value of skewness is positive and the value of kurtosis is negative. As per the comment of Kou *et al.* (2019), the negative kurtosis indicates a flat peak of the data whereas the positive skewness illustrates a long tail on the right side. The range of the mean for gathered responses is 7 to 12 which shows the data concentration level. On the other hand, the variances of gathered responses lie between 17 and 7.

Multiple Regressions

The multiple regressions indicate the causal relationship between the chosen variables which are brand reputation and customer first impression. As per the comment of Hilorme *et al.* (2019), multiple regressions is performed to investigate the significance level of collected numerical information.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. Change	
1	.707 ^a	.500	.493	2.00965	.500	73.035	1	73	.000	1.838

Table 5: Model summary

(Source: SPSS)

Table 5 illustrates the value of adjusted R squared which is 0.493 which indicates that the gathered information is highly responsible. Further, the value of F change is 73.035, and the Durbin-Watson value of 1.838 which shows that the prediction lies closely with the expected outcome.

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	294.963	1	294.963	73.035	.000 ^a
	Residual	294.823	73	4.039		
	Total	589.787	74			

Table 6: ANOVA

(Source: SPSS)

The sum squares value of regression is 294.963 with 1 degree of freedom and the value of residual is 294.823 with 73 degrees of freedom with a significant value of 0.000. As per the words of Griffith (2019), a significant value is less than 0.05 indicates a highly reliable outcome.

Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.



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	B	Std. Error	Beta		
1 (Constant)	3.445	.648		5.318	.000
IV	.466	.055	.707	8.546	.000

Table 7: Coefficient

(Source: SPSS)

The table shows that the t statistic for the responses gathered in return to the questions regarding brand reputation is 8.546 with a significant level of 0.00. The beta value for this response is 0.707 which shows that the predicted value provides the result with high accuracy degree.

CONCLUSION

The first impression of any brand is the main factor that decides the success or failure of the company. Once a negative review is developed in the mind of the consumers the company has to stay in the loss for a long duration of time. The points which are essential to building a good image and a strong reputation among consumers are described in this research. A strong brand reputation is needed to increase the sale of a product as a result the profit earned by the company is more.

References

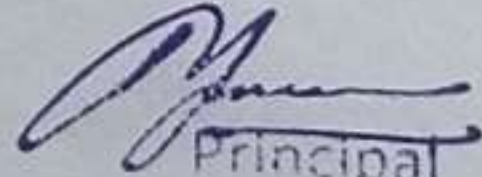
- Allevi, E., Basso, A., Bonenti, F., Oggioni, G., & Riccardi, R. (2019). Measuring the environmental performance of green SRI funds: Consumers behaviour. A DEA approach. *Energy Economics*, 79, 32-44. . Retrieved from: <https://pdfs.semanticscholar.org/5890/4ca9ea7f5f8f4d0288c770b92d1769130193.pdf> retrieved on: 22nd February 2023
- Chang, Y., Li, Y., Yan, J. and Kumar, V., 2019. Getting more likes: The impact of narrative person and brand image on customer-brand interactions. *Journal of the Academy of Marketing Science*, 47, pp.1027-1045.
- Döttling, R., & Kim, S. (2022). Sustainability preferences under stress: Evidence from mutual fund flows during COVID-19. Available at SSRN 3656756. . Retrieved from: <https://www.westernsouthern.com/-/media/files/touchstone/active-share/ssrn-id3247356.pdf> retrieved on: 22nd February 2023
- Foroudi, P., 2019. Influence of brand signature, brand awareness, brand attitude, brand reputation on hotel industry's brand performance. *International journal of hospitality management*, 76, pp.271-285.
- Griffith, S. J. (2019). Opt-in stewardship: Regression analysis Toward an optimal delegation of mutual fund voting authority. *Tex. L. Rev.*, 98, 983. . Retrieved from: https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=2016&context=faculty_scholarship retrieved on: 22nd February 2023
- Kim, M., Yin, X. and Lee, G., 2020. The effect of CSR on corporate image, customer citizenship behaviors, and customers' long-term relationship orientation. *International Journal of Hospitality Management*, 88, p.102520.





Kou, G., Chao, X., Peng, Y., Alsaadi, F. B., & Herrera-Viedma, E. (2019). Regression analysis Machine learning methods for systemic risk analysis in financial sectors. *Technological and Economic Development of Economy*, 28(5), 716-742. . Retrieved from: http://faculty.bus.olemiss.edu/rvanness/Speakers/Presentations%202016-2017/Albert%20Wang%20-%20WY_Terrorist_1_30_17.pdf retrieved on: 22nd February 2023




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A CRITICAL ANALYSIS OF INDIA'S GOODS AND SERVICES TAX

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Abstract— Historically, indirect taxes have played a significant role in India's fiscal system. Prior to the implementation of tax changes in the nineties, the primary contributor to the government's coffers came through indirect taxation. The widespread poverty in India was cited as the primary reason for the country's dependence on indirect forms of taxation. Consequently, expanding the direct tax base was constrained by structural barriers. Cascading and skewed taxes on the production of goods and services are hallmarks of India's indirect taxation system, which in turn reduces productivity and slows economic growth. This is one of the reasons why India's economic development is so much slower than that of other wealthy countries. A simple tax known as the goods and services tax is necessary to eliminate the infinite number of taxes that exist under the existing system, some of which are charged by the centre while the rest are imposed by the states, and to reduce the burden on taxpayers. Current taxation procedures include an unlimited number of taxes, only a small subset of which are collected centrally (GST). This article presents a comprehensive analysis of the Value added Tax, including its rationale, its model, its pros and cons, and its effects on the Indian economy.

Keywords—GST, Indian Governance, Taxes, India's Fiscal System.

INTRODUCTION

In recent decades, India's economy has been among those with the highest rates of growth. Several reasons, including market reforms, a flood of foreign direct investment, rising foreign currency reserves, a thriving IT and real estate industry, and a robust capital market, have contributed to this expansion. Indirect taxes have always played a crucial role in India's tax system. (Smith et al., 2022) Before-tax changes were enacted in the 1990s, indirect taxes brought in the lion's share of tax money. The main rationale for relying heavily on indirect taxes was that expanding the base of direct taxes was difficult since the bulk of the people in India was impoverished. Cascading and distorted taxes on the production of goods and services are hallmarks of India's indirect taxation system, which in turn dampens productivity and slows economic progress. It is time for a simplification of the current tax system, which imposes an overwhelming number of taxes on citizens but collects just a fraction of its revenue from the federal government. Goods and services tax would accomplish this (GST). There has been a growth in the number of MNEs (multinational corporations) operating in India and, as a result, a rise in the volume of commerce between the country and others. This opens up a lot of possibilities for the government to reform the tax system. This article examines the rationale behind the Goods and Services Tax, the GST Model, its benefits and drawbacks, and the effect it has had on the Indian economy. (Lyeonov et al., 2023)

OBJECTIVE

The research aimed to fulfill the following objectives:

- To study the goods and services tax (GST), its structure, and its components





- Challenge of the goods and services tax (GST),
- Divisions of GST and advantages of the GST

METHODOLOGY

Earlier versions of the constitution granted the central government the authority to impose an excise charge on manufactured goods and a service tax on the provision of services. In the same vein, it grants the state government the authority to impose the value-added tax (VAT) that corresponds to the state tax on the sales of products. Due to the exclusive distribution of fiscal authorities, the indirect tax system in the nation has been subject to manipulation. In addition, a few governments impose an entrance tax on the purchase of products inside their respective jurisdictions. Therefore, in order to solve this issue, the government at this stage has implemented a single taxation system that incorporates all taxes into itself. This is done to avoid the various issues that are associated with the taxation system, and as a result, this control is now in the hands of only one person. Goods and services are subject to a tax known as GST. It is a replacement for direct taxes collected by the federal and state governments of India and is implemented as an indirect tax throughout the whole country.

The Goods and Services Tax (GST), Its Structure, and Its Components

Over the last two decades, India's tax collection system has seen a number of changes. The Goods and Services Tax applies to anything that is produced, sold, or purchased on a national basis (GST). The Goods and Services Tax, or GST, is projected to have far-reaching consequences on the tax system of India and is largely regarded as one of the most significant tax changes attempted in India since the nation earned independence. Consolidating and simplifying the many taxes now charged on the manufacturing, distribution, and consumption of products and services is the primary objective of this reform. This will eventually replace the existing convoluted system of taxation. The Goods and Services Tax, or GST for short, is one of the most comprehensive plans for tax reform. The ultimate goal is to create a global market free of monetary restrictions so that all countries may participate. Paying the national sales tax in India is consistent regardless of whether you are buying or renting. in accordance with According to (van der Enden & Klein, 2020)

The Goods and Services Tax (GST) will replace all existing indirect taxes, making their collection and management more simpler. The existing system of many taxes being imposed on an identical product at various periods will be replaced with a consistent, one tax across the board, through inputs to outputs, thanks to the Goods and Services Tax (GST) taxation law. It spells the end of the current order of things. The Goods and Services Tax (GST) is built on the principle of "One Country, One Tax" in an effort to streamline taxes. The Goods and Services Tax will replace many of the existing indirect taxes paid to the federal government and individual states (GST). This is due to its widespread use throughout the whole value chain, from the procurement of inputs to the ultimate distribution of the finished product. The Dual-GST model used in this jurisdiction consists of the CGST and the Goods and Services Taxes imposed by the individual states (SGST). The Central Goods and Services Tax will eventually replace the many indirect taxes now levied by the federal government. These taxes include the central excise duty, central sales tax, service tax, special additional charge on customs, and counter-veiling expenses (CGST). The SGST, if completely implemented, will subsume a variety of other state taxes, including as the state value-added tax, the state purchase tax, the state luxury tax, the state octroi, and the state gaming tax. In addition to the GST, there is also an interstate sales tax called the Integrated Goods and Service Tax (IGST). The Products and Services Tax (GST) is not a new tax, but rather a method of tracking international transactions and assigning tax collection responsibilities to the country in which final consumption of the goods or provision of the service occurs. (Dharmayanti, 2023)





The Effects of GST in India: The most prominent GST reform had a significant influence on the Indian economy, as well as on small, medium, and big firms, in addition to the average Indian citizen and the Indian government. In general, it has left an indelible imprint on the economic landscape of India.

Since it was first implemented, the Goods and Services Tax (GST) has had an impact on the daily lives of billions of people throughout India. The effect is like riding a roller coaster since there have been rate additions as well as substantial relaxations from previous taxes. It is true that this innovative tax reform has made the taxation system easier to understand, but it also comes with its own challenging move. Let's take a look at a few pieces of data to get a better idea of how the Goods and Services Tax (GST) reform in India has affected the country. (Palmer)

- An enlargement of the tax base as an increasing number of taxpayers have switched to the GST regime, there has been a significant expansion of the tax base as well as a modification in the compliance stances of taxpayers.
- Revenue Collections: Without a doubt, the quantity of revenue collected went through a meteoric climb as a direct result of the introduction of an internet taxation system, which rendered tax evasion impossible.
- Rationalization of Rates: In order to rationalize the rates that are applicable to the different items that fall under GST, the government made a number of significant initiatives. For example, although there used to be 19% of things that fell under the 28% GST slab, there are now just 3% of items that fall under that particular slab. That indicates the government is making a concerted effort to reduce the GST rates on a variety of goods.
- E-way Bill System: Despite having been plagued by a number of technological issues, the GST compliance process has recently been transformed into a more efficient operation.
- Requirements posed by taxpayers: In response to the requirements posed by taxpayers, the government has made significant changes to better accommodate the requirements of taxpayers.

The combination of these several elements has resulted in a simpler taxation system that has, to a significant degree, assisted in the reduction of tax evasion. (van der Enden & Klein, 2020)

According to recent studies, the Goods and Services Tax (GST) has resulted in an increased need for 1.3 million qualified financial professionals. As a direct result of this, a flood of possibilities has been created for those who have an interest in accounting, finance, and taxes. Additionally, this paves the way for new opportunities for those who are interested in the expansion and development of their careers. The government is aware that individuals get more anxious as the dates for tax payment deadlines draw near. In addition, the new tax system and the requirements for complying with it made life more complicated for individuals all throughout the country. As a result, the government came up with the idea of GST Practitioners as a means to alleviate the burdens placed on taxpayers as a result of the Goods and Services Tax (GST). These GST Practitioners could act as representatives of taxpayers and assist with the filing of returns and other GST compliance requirements. Now, if you are curious about how to become a GST Practitioner and are contemplating the subject, the first step you should do is to enroll in the GST Course. These classes may be taken offline or online, and there are groups that meet throughout the week as well as on the weekends. (Slemrod, 2008)



CHALLENGE

There seem to be certain fundamental flaws in the GST model enforced by the union government that may render it ineffectual in achieving the intended objective.

- One country, one tax is a flawed premise that cannot be applied to India in the form of GST. After the introduction of GST, there are 31 taxes instead of the previous 32 (service tax, excise duty, sale tax, including 29 state VAT taxes); these 31 taxes are made up of IGST, CGST, and 29 SGST, creating a complex tax system that goes against the idea of "one nation, one tax".
- Another fundamental concept behind GST implementation is that a single rate of taxation is not viable in India since, according to the 101st amendment to the constitution, Article 246 A says that the parliament and legislative assembly may levy taxes on goods and services. As a result, not only the union government but also the state governments had the authority to set their own GST rates. Article 279 A of the constitution specifies that the GST council has only advisory powers; it is now up to state governments to impose their own GST rates, which distorts the country's whole GST uniformity rate scheme. (2020)
- The government established the goods and services tax network (GSTN), which is in charge of creating the GST portal to provide services such as GST registration, GST return filing, IGST settlement, and so on, which need a strong IT network. It is well acknowledged that India is still in its infancy in terms of IT network connection.
- The lack of trained and competent labor with up-to-date GST topic knowledge has resulted in an increased workload for experts across industries.
- The Indian insurance industry is still underdeveloped, with fewer than 10% of the population insured. This was the motivation behind the government initiative "Pradhan Mantri Jeevan Bima Yojana," but with the implementation of GST, insurance premiums have increased by 300 basis points, making it difficult for insurance companies to enter the market and acting as a detriment to insurance awareness campaigns. The government program "Pradhan Mantri Jan Dhan Yojna" undertaken by the government that every citizen has a bank account would encounter challenges since the levy on financial services has been hiked by 3% in the new goods and services tax system.
- However, although the government is making strides toward a digital India, the telecommunications industry is facing a major challenge, telecom services are getting costlier as telecom services will attract a GST tax rate of 18% which is 3% higher than the previous service tax rate, even when India's rural tele density is not even 60%.
- The GST administration aims to exclude petroleum items from GST, despite the fact that petroleum products have been a key contributor to inflation in India. (Shukla & Kumar, 2019)
- Because they can't afford to hire dedicated IT and accounting staff to keep track of and file GST forms, small businesses are finding the GST tax rate assessment and the resulting increase in operating costs to be particularly perplexing.



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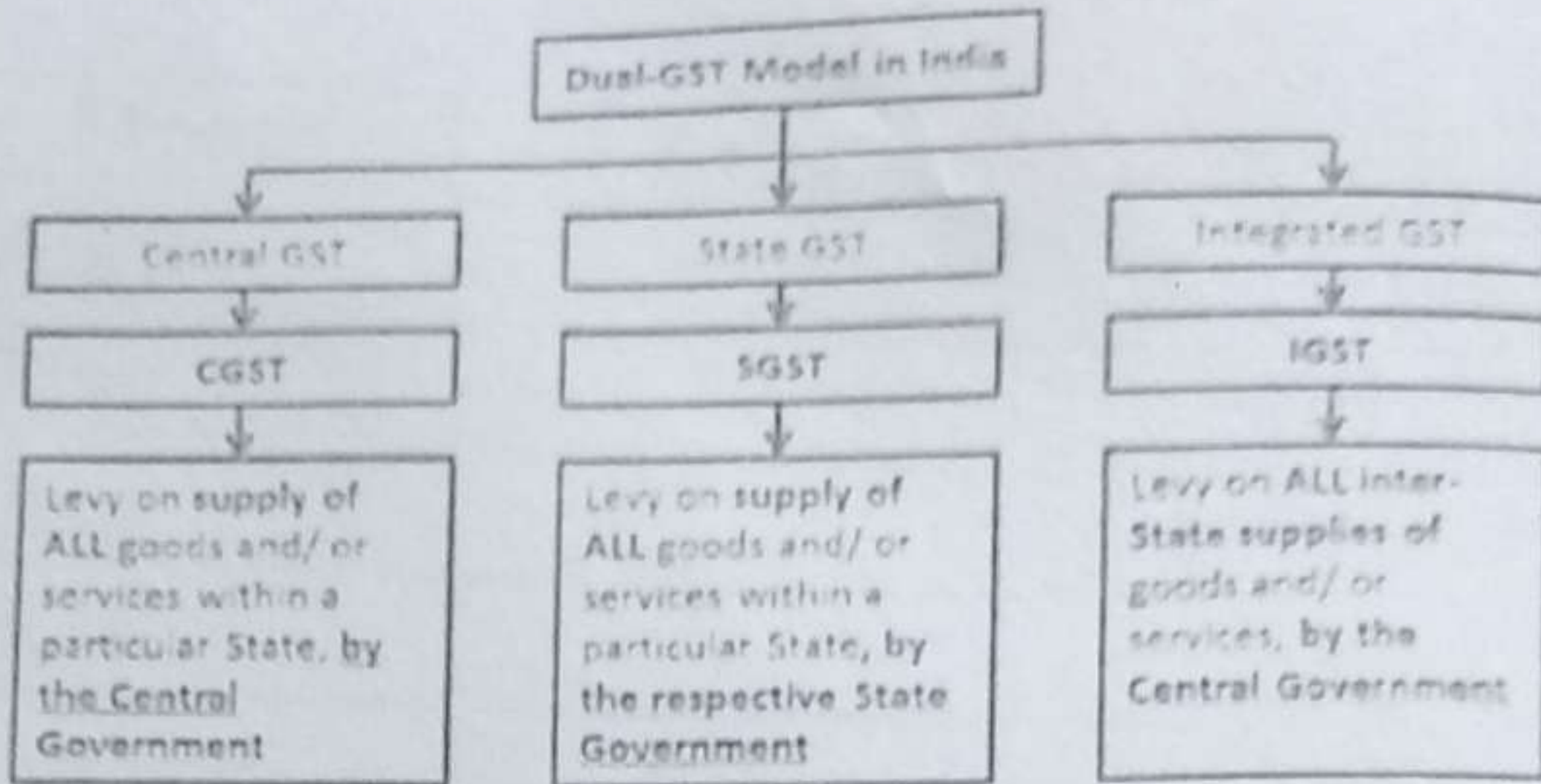


FIGURE 1. GST MODEL

I. DIVISIONS OF GST AND ADVANTAGES OF THE GST

➤ Divisions of GST

The recently enacted Goods and Services Tax (GST) law replaced many different forms of indirect taxes with itself, and it may be broken down into four distinct categories. These are the four categories:

- A central tax on goods and services is referred to as the CGST. It applies to retailers and wholesalers doing business inside the state. Any taxes that are paid will be distributed to the entity that serves as the central authority.
- A state tax on goods and services is referred to by its acronym, SGST.
- It applies to retailers and wholesalers who do business inside the state. The amounts of taxes that are paid will be distributed among the several governmental authority bodies.
- An integrated goods and services tax is what is meant by the abbreviation "IGST." It is relevant to vendors that operate in both commerce beyond state lines and import and export transactions. The amount of taxes that are paid will be distributed to both the state and the central authority body.
- The Union Territory Goods and Services Tax (UTGST), if the transaction is connected to any union territory (Smith et al., 2022)

➤ Advantages of the GST

The implementation of the GST has resulted in a number of advantages all over the world. The primary objective is to preserve the country's existing tax structure while simultaneously fostering economic growth and expanding exports. The following is a summary of some of the advantages that the GST offers.

- The Goods and Services Tax (GST) establishes a nationwide single market.
- Encourages investment from other countries
- Contributes to the establishment of consistent taxes
- Contributes to the enhancement of production and encourages entry into the global market.
- The tax burden for small businesses is either nonexistent or little.
- When customers shop at locally owned and operated businesses, they get several benefits. (Palmer)



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Month	GST Collection in Rs. Crs
April	113865
May	100289
June	99939
July	102000
August	98202
September	91916
October	95380
Total	701591

FIGURE 2: - MONTHLY GST COLLECTIONS IN INDIA IN FY2020-21 (IN RS. CRS)

CONCLUSION

The Goods and Services Tax (GST) was enacted to modernise India's indirect tax system. Consolidating many federal and state levies into one might prevent cascading or double taxation and promote a single national market. The tax's apparent ease of administration bodes well for its eventual adoption and enforcement. The Goods and Services Tax (GST) is predicted to provide companies an edge in the marketplace and encourage the growth of e-commerce. By establishing a single market and lowering taxes for people, Goods and Services Tax (GST) would significantly alter India's economic climate. The current indirect tax system would undergo significant changes in many respects, including organisation, computation, payment, compliance, use, credit, and reporting. Companies everywhere are moving swiftly to adapt to the dynamic global economy. As the global economy expands and diversifies, there is a need for more harmonised national tax systems and laws. If efforts are adopted to promote awareness and keep an eye on pricing before the GST is implemented, there may be less reluctance to implementing the anti-profiteering clause. For the GST to regain the trust of the public and business community, it may be necessary to form a committee to deal with any and all problems, establish an audit unit whose only purpose is to check for anti-profiteering, or adopt laws outlining the specific actions that are illegal. For a countrywide launch to succeed, a solid IT network and infrastructure are also required. The creation of a unified computer network has only started. As a result, the government has begun the National Digital Literacy Mission to help people improve their skills in this area. The implementation of GST necessitates a review of the original goals. The "One Nation, One Tax, and One Market" goal of GST can never be realised until these issues are addressed. Input tax credit set-offs, service tax set-offs, and the unification






of multiple taxes have all been shown to be beneficial to businesses and consumers alike under the proposed Goods and Services Tax (GST). It's also important to highlight the many industries and fields of study that have benefited from GST.

REFERENCES

- [1] Dharmayanti, N. (2023). The effect of tax office service quality and taxpayer income on land and Building Tax Compliance. JAK (Jurnal Akuntansi) Kajian Ilmiah Akuntansi, 16(1), 48-64. <https://doi.org/10.30656/jak.v10i1.4927>
- [2] How tax administrations can relate to tax service providers. (2016). Rethinking Tax Services, 71-82. <https://doi.org/10.1787/9789264256200-8-en>
- [3] Lyconov, S., Tiutiunyk, I., Vasekova, M., Oleksandr Dziubenko, & Samchuk, M. (2023). Tax investment, institutional and social channels of economic shadowing: Challenges for macro-financial stability and good governance. Public and Municipal Finance, 11(1), 128-141. [https://doi.org/10.21511/pmf.11\(1\).2022.11](https://doi.org/10.21511/pmf.11(1).2022.11)
- [4] Palmer, C. (n.d.). Good tax policy on shaky ground? an assessment of tax policy responses to natural disasters. <https://doi.org/10.26686/wgtn.17059994.v1>
- [5] Shukla, S., & Kumar, R. (2019). Role of trust in adoption of online good service tax filing in India. Vikalpa: The Journal for Decision Makers, 44(3), 99-114. <https://doi.org/10.1177/0256090919877333>
- [6] Slemrod, J. (2008). Is tax reform good for business? is a pro-business tax policy good for America? Fundamental Tax Reform, 142-170. <https://doi.org/10.7551/mitpress/9780262042475.003.0008>
- [7] Smith, N., Idris, M., Schüttr, F., & Ko, R. (2022). Data for good, what is it good for? Challenges, opportunities, and data innovation in service of refugees. Harvard Data Science Review. <https://doi.org/10.1162/99608f92.a6dbaef3>
- [8] van der Enden, E., & Klein, B. (2020). Good tax governance? ...govern tax good? SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3610858>




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This is to certify that

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DIGITAL TRANSFORMATION CHALLENGES IN AGRO-SME'S IN PUNE DISTRICT, INDIA

Gauri Jadhav, Research Scholar, MITWPU, Pune & Assit. Prof. Foresight College Of Commerce, Pune
Dr. Shubhangi Galkwad, Research Guide, MITWPU, Pune

Abstract

Purpose – The purpose of this study is to know the challenges facing by the SMEs which was the finding and further scope for the study of the researcher previous research done. A systematic literature review: digital marketing and its impact on agro SMEs" to understand the challenges facing by smes in the digital transformation on the intersection of marketing and sales departments.

Design/methodology/approach – This area has not explored much as it requires high attention in academic literature while considerable amount of research exists surrounding the marketing and sales integration, the influence of the trend of digital transformation on both departments and how it affects their collaboration is not investigate in-depth and is therefore studied by qualitative research via semi-structured interviews in ten small and medium organizations in Pune District.

Findings – By considering the findings the collaboration between the marketing and sales departments in selected organizations is perceived as good. However, generation-related conflicts occur due to different demographic structures of employees. The study provides evidence that the digital transformation affects the Marketing and sales integration and thus, the overall organizational performance.

Originality/value – Moreover, it is crucial that organizations face the challenges that occur in terms of interdepartmental relationships and be aware of the huge potentials which arise due to digital transformation to improve the marketing and sales collaboration.

Keywords: Marketing, Collaboration, Sales, Digital transformation, Digitalization, Generational conflict

Paper type Research paper

1. Introduction

"At present marketing must be understood not in the old sense of making a trade – 'telling and selling' – but in the new sense of satisfying client needs" (Kotler, Armstrong, Harris, & Piercy, 2016, p. 5).

This statement exemplifies the divergences as well as the gap between the marketing and the sales both the department. Both are different functions which often exhibit different goals. They furthermore claim different skills and abilities (Shapiro, 2002). Generally, sales provide knowledge about customer's wants and needs. In contrast, marketing makes use of this information by combining it with other sources to create products and value proposition more competitively (Keszey & Biemans, 2016). Even though marketing and sales validate crucial differences in their goals, it is essential to be aware of their shared potential. If both departments operate in a way that is complementary, the efficiency of how customers are acquired, treated and retained increases (Shapiro, 2002). In recent years, there has been increased attention toward the relationship between marketing and sales (Hughes, Le Bon, & Malshe, 2012; Sleep, Lam, & Hulland, 2018; Le Meunier- Fitzhugh & Massey, 2019). Recent research emphasis the role of digitalization in interfunctional coordination within enterprises (Ruiz-Alba, Guesalaga, Ayestar'an, & Morales Mediano, 2019). This research has not yet covered the impact of digital transformation on the collaboration of marketing and sales departments. Since technology is increasingly changing,



it enables organizations to simplify co-operation between departments (Le Meunier-FitzHugh & Douglas, 2016). Therefore, it is even more important that this study explores the collaboration between marketing and sales in selected organizations in Pune district, India to determine whether digital transformation affects this.

However, digital transformation is the need of an hour in every organization nowadays as frequent examples from the business world show. Phil Fasano, CIO of Kaiser Permanente, coined, "every company is already a digital company, even if they don't perceive themselves to be one" (Baldwin, 2014, p. 23). According to Höttges, CEO of Deutsche Telekom (2017) "Anything that can be digitized will be digitized, and anything that can be networked will be networked" (p. V). To sum up, there is general agreement among researchers that through a good collaboration between marketing and sales departments the business performance can be increased.

Furthermore, there is general consensus that digital transformation will shape the future of organizations. However, there exists no research how the digital transformation affects the collaboration of marketing and sales departments. This study was conducted as an organizational-based research. In total, ten selected organizations are investigated through semi-structured expert interviews.

2. Literature review

The distinction of sales and marketing provokes increased competition among the two departments and their relationship remains a critical difficulty to many organizations nowadays (Dawes & Massey, 2005; Kotler, Rackham, & Krishnaswamy, 2006; Madhani, 2016a; Le Meunier-FitzHugh & Douglas, 2016). However, the overall goals of both departments are toward the same direction, discrepancies in terms of targets, behavior and cultures are apparent (Homburg & Jensen, 2007). Since their roles and objectives deviate, the collaboration between both departments is affected (Madhani, 2016a). The literature shows that there is a significant variety of divergent perspectives concerning the relationship between sales and marketing. According to Kotler et al. (2006), "Salespeople accuse marketers of being out of touch with what customers really want or setting prices too high. Marketers insist that salespeople focus too myopically on individual customers and short-term sales at the expense of longer-term profit" In larger organizations marketing and sales departments are seen as two separate units (Le Meunier-FitzHugh & Douglas, 2016). In addition, Madhani (2016a) argues that "Sales is interpersonal, push driven, more tactical, and has a short-term focus while marketing is analytical, pull driven, more strategic and has a long-term focus" (p. 21). Although the marketing and sales relation seems "symbiotic and complementary" there is evidence that especially in practice the coordination of the two departments seldom turns out to be easy (Smith, Gopalakrishna, & Chatterjee, 2006). The perception of marketing and sales differs significantly, as the sales function is more tactical orientated and the focus is short term, while marketing is characterized by a strategic orientation with a long-term focus (Piercy, 2010). Thus, in order to increase the marketing and sales collaboration the alignment of both functions in a similar direction is necessary (Madhani, 2015).

Sales and marketing have similarities since both are customer-oriented but in terms of their key focus and orientation differences occur (Krafft & Haase, 2004). These differences lead to tensions which affect the relationship and ignite competitive thinking. Recent studies suggest that organizations achieve a competitive advantage by improving the relationship between sales and marketing. Furthermore, scholars agree that the marketing and sales collaboration provides a significant advantage due to an overall improved organizational performance (Le Meunier-FitzHugh & Lane, 2009; Piercy, 2010; Lyus, Rogers, & Simms, 2011; Madhani, 2015). New research suggests there is evidence that organizations improve the alignment and integration of their sales and marketing departments to ensure consistency in front of the

customers (Rouziès, et al., 2005; Le Meunier-FitzHugh & Piercy, 2007; Le Meunier-FitzHugh & Piercy, 2011; Le Meunier-FitzHugh & Douglas, 2016; Madhani, 2016b). One important theoretical framework (see Figure 1) in this research area is the "framework for sales-marketing integration" developed by Rouziès, et al. (2005).

The authors suggest that four types of mechanisms improve the sales-marketing integration. Namely, they distinguish between structure, process/system, culture and people. Subsequently, Rouziès et al. (2005) suggest that the greater the sales-marketing integration – which is influenced by these integrating mechanism – the higher the organizational performance. Furthermore, digital transformation is one of the most commonly discussed topics especially in Europe (Probst, et al., 2017). The prosperity as well as corporate growth highly dependent on digitisation. Moreover, their impact is different as per implementation and as per rural and urban area. (Jadhav, G.G., Gaikwad, S.V. and Bapat, D. (2023) As evident by the recent Corona crisis, corporations that have significantly focused on digitalization are better equipped to navigate these difficult times with

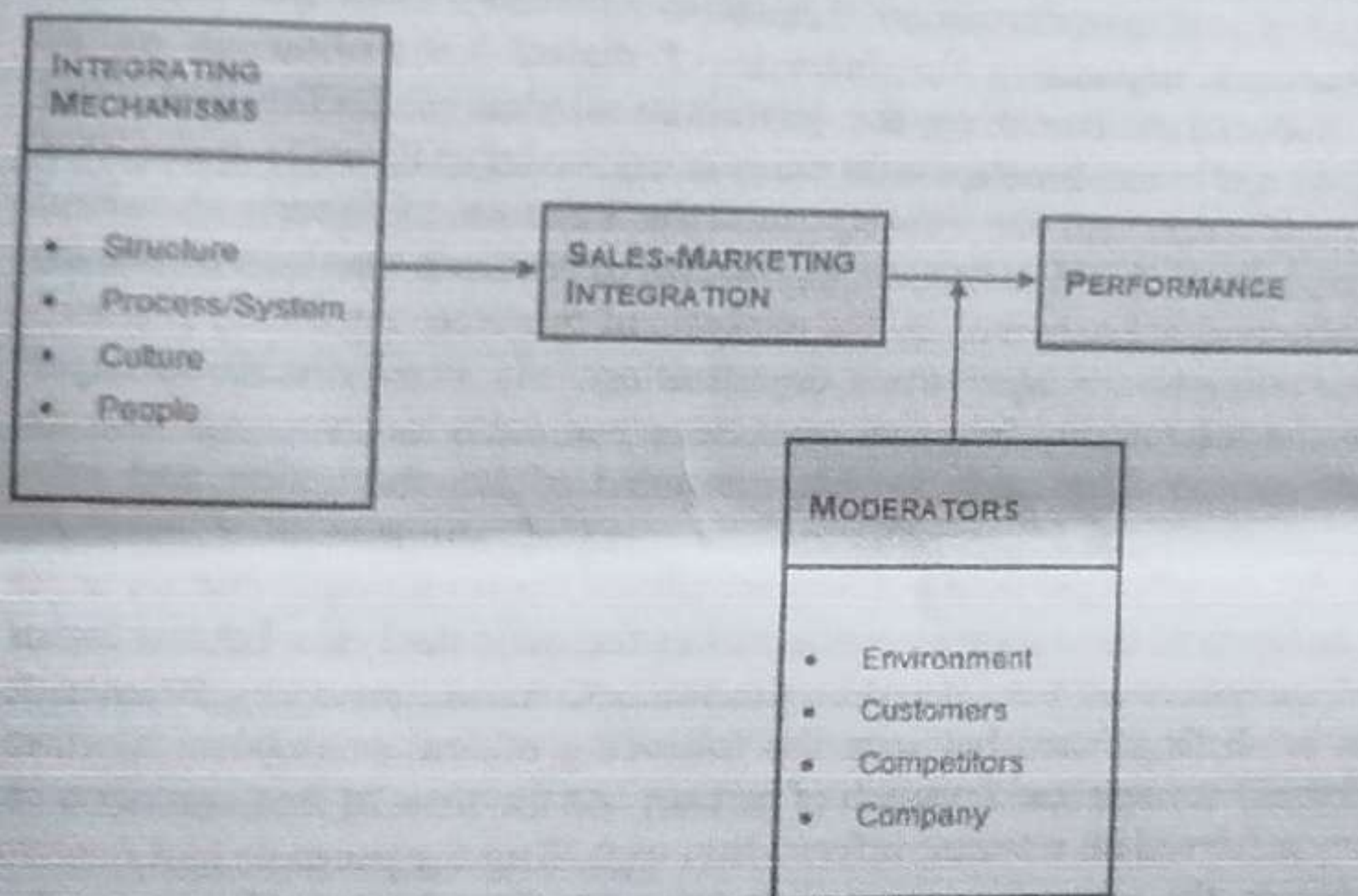


Figure 1. Framework for sales-marketing integration form adapted by Rouziès et al. (2005) technological solutions (Timberg, Harwell, Reiley, & Bhattarai, 2020; Wakabayashi, Nicas, Lohr, & Isaac, 2020). Therefore, the exploration of this research project was conducted within selected SME'. This data collected in several companies shows that digital business models already exist and are implemented successfully. However, by mentioning the disruptive nature of digital transformation on businesses, two vital areas within an organization are significantly affected by these changes: marketing and sales (Struto Ltd, 2017). The traditional methods of marketing and sales are ever changing and the digital transformation can be described as one factor in the disruption of classic marketing and sales methods (Gimpel & Röglinger, 2015). While there is some research (Lamberton & Stephen, 2016; Hauer, Harte, & Kacemi, 2018; Lies, 2019; Sridhar & Fang, 2019; Laverie, Humphrey, Manis, & Freberg, 2020) on the digital transformation in marketing, there is only limited research (Heinze & Matt, 2018; Steenkamp, 2020) on the impact of sales mainly focusing on sales channels and tools. However, the relationship between marketing and sales in the digital age has not been the focus of academic in-depth investigation. Just a few reports from practitioner (Gorajia, 2016) are available. Therefore, this paper aims to provide further research with regard on the effect of digital

transformation on marketing and sales collaboration in sme's in India. Based on and identified in the literature review the following indicative research questions will be answered. These indicative research questions (RQ) represent the basis for the development of the interview questions for the semi-structured interviews:

- RQ1. How is the marketing and sales collaboration configured in SME's of Pune district?
- RQ2. How does digital transformation affect SME's and in particular the marketing and sales departments?
- RQ3. How does digital transformation affect the integration of marketing and sales in SME's?
- RQ4. Are there any challenges or opportunities for the marketing and sales collaboration due to digital transformation?

3. Research approach

This paper approaches the study objective inductively by analysing the relationship between marketing and sales departments in the face of digitalization with interviews and uses the collected data to formulate a theory (Bryman & Bell, 2015; Saunders, Lewis, & Thornhill, 2015). On the one side, this research project aims to explore the marketing and sales collaboration in terms of digital transformation. Literature currently does not provide a generally accepted framework explaining the impacts of digital transformation on the marketing and sales collaboration. Based on the procedure of data collection via semi-structured expert interviews and in combination with the existing model of Rouziès et al. (2005) this paper presents a combination and the consequential formulation of theory. A mixed-method approach between inductive and deductive approaches of research was hereby chosen. The research aim and objectives are achieved by the analysis of qualitative primary research. Therefore, this study investigates ten agro smes organizations via semi-structured expert interviews to determine the relationship between marketing and sales departments and the impact of digital transformation. The study sample consisted of ten marketing and sales individuals in total, three marketing and three sales experts in organizations. This sample which includes mainly agro food industry which are the major contributors in the economy of India. The analysis of the data was conducted as thematic analysis. Ethical issues with data collection and analysis were considered by the authors. As suggested by Bryman & Bell (2015) it needs to be distinguished between the following ethical principles: harm to participants, lack of informed consent and invasion of privacy. At the time of first contact with the possible experts, they achieved all relevant information regarding the purpose and content of the research. Furthermore, the researcher ensured that the developed Gantt chart was also attached by sending the interview guideline. This gave participants an appropriate overview and the necessary transparency of the research project. Furthermore, it is crucial to differentiate between commercial confidentiality and individual anonymity. Commercial confidentiality could be assured - if requested by the company - due to the willingness of the researcher to sign a confidentiality agreement. That led to more openness during interviews, made clear what information was accessible and disclosed for the analysis and resulted in rich data (Bryman & Bell, 2015). Since the semi-structured expert interviews were conducted with a relatively small number of experts in certain organizations, it is not possible to generalize those findings. However, one can argue that instead of generalizability, transferability is rather applicable since the findings are transferable to other companies and states (Bryman & Bell, 2015).

4. Data analysis and discussion

In the following an overview of the in-depth analysis of the collected data is provided. The interviews were conducted during March till May 2023 via telephone and lasted at least 45 minutes. To avoid language barriers the researcher questioned the interviewees in their native language, Marathi, which additionally allowed for broader variety of answers and provided an

instant link between the researcher and interviewees. After conducting the interviews, the recordings were transcribed into a written form by the researcher. Since the interviews were conducted in Marathi, the answers of the respondents had to be translated into English. Thereby, the original transcripts in Marathi were transformed into an excel sheet.

For the analysis of the data, thematic analysis was used. Therefore, within four sub-sections – each concentrating on one separate RQ – the findings of the semi-structured elite interviews are presented before the data is contextualized with the literature.

To answer the first research question how the marketing and sales collaboration is configured in SMEs, the data analysis suggests that in terms of the organization and structure the marketing and sales departments in SMEs are largely similar. The distinction between the marketing and sales experts does not provide any special particularities or characteristics. Furthermore, the interviewees perceive the general collaboration between the marketing and sales department as good.

However, one aspect that is mentioned from the experts is generation-related conflicts, which can occur between the different departments. Especially the differences between the departments in terms of the age structure of the employees are perceived as a challenge within the collaboration between marketing and sales and are not thoroughly discussed in the literature before. According to the experts, it is perceived that marketing consists of “a younger mind-set” compared to the attitude of the sales departments which are described as “old school”. Marketing experts stated, “The attitude of sales people is very “old school” since they see marketing campaigns as extra work and do not understand the potential.”

Although there are similarities between the literature and the findings of this study, the extreme mutually different perspectives between marketing and sales which are described in the literature (Kotler et al., 2006; Madhani, 2016a) could not be confirmed by the respondents. However, a result of the interviews is the recognizable changing role of marketing and sales, since sales is described as moving from a tactical toward a more strategic position.

Differences occur by evaluating the relationship type (undefined, defined, aligned, integrated) between the departments. Generally speaking, the marketing experts tend to perceive their relationship with sales as “aligned” whereas the sales respondents tend to classify the relationship-type as “defined”. The recommendations of the experts for an improved marketing and sales collaboration vary. The marketing experts recommend more exchange and feedback in order to strengthen personal contact and therefore, improve the collaboration. In contrast, the sales experts suggest a higher market awareness as well as the appropriate handling of data to increase the collaboration between the two departments.

In order to answer the second research question how digital transformation affect SME's and in particular, the marketing and sales departments, the interviewees were carefully forced about these topics. By considering the insights the experts offered in terms of how SMES deal with digital transformation in general, it is clear that this trend is undeniable. All respondents agreed that the organizations are handling the digital transformation in an appropriate way and realized its importance for future success. The fact that the companies have already accepted the trend as crucial and considered digitalization in their overall strategy, as well as in their daily business, is consistent with the discussion in the literature.

Since the impact of the digital transformation trend influences the departments and their collaboration equally, it is crucial to analyse this interdependence. During the analysis, it became apparent that the interview partner provided a much deeper insight than the literature did. All respondents agreed that the organization has a Chief Digital Officer (CDO). Two marketing experts (A, B) and two sales experts (D, E) mention that the trend affects the company in many different ways but mainly affected are customers as well as employees: The customers are affected in the way that the products, the companies offer are digitally networked. For example, expert B explains that “[...] the machines can communicate with X



and y." The respondents argue that due to new programs and technologies (for example a new customer-relationship-system (expert B)) the daily business is easier, more efficient and increases the transparency. Respondent E argues that transparency is a result of the availability of data: "Being digital means being connected." Sales expert D adds that due to digital transformation the sales activities are easier to control and measurable. However, according to expert D: "The use of data is not a self-evident component which shows that only few people in our company have realized how important data is and that data is already available." Other concrete examples that the experts perceived as part of the digital transformation are the "availability of data", "new programs and technologies" and therefore, more "transparency". Concluding, this means that while digital transformation seems to simplify the day-to-day business, making it more quantifiable and thus transparent, it has not yet been fully accepted and widely adapted within the examined companies.

An overview of the main findings of the third research question on the impact of digitalization on the marketing & sales integration based on the framework of Rouziès et al. (2005) is presented in Figure 2. The digital transformation affects the integration of marketing and sales in SME's organizations due to the various types of integrated mechanisms (Structure, Process, Culture, and People). The findings show that each type plays a

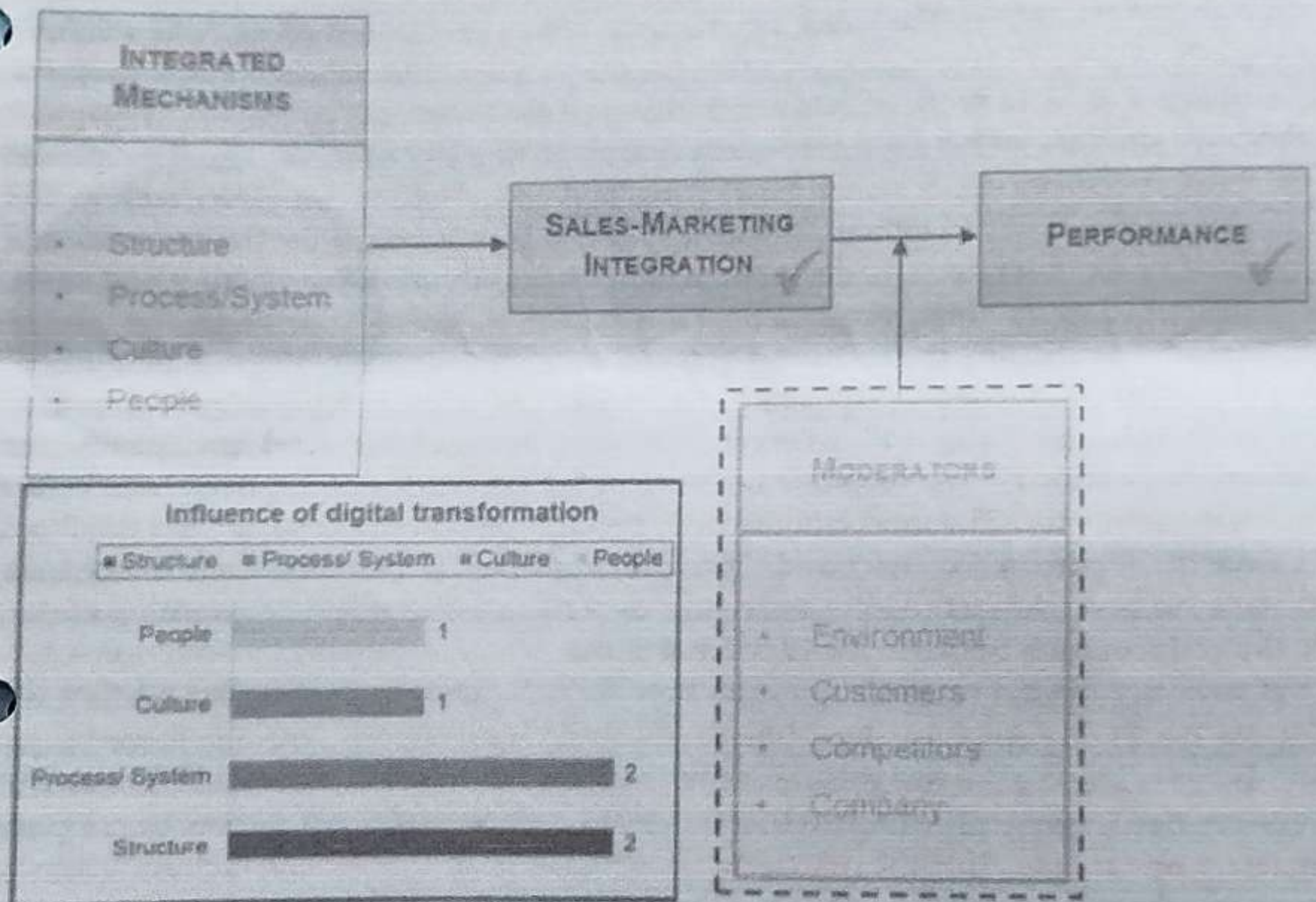


Figure 2. Impact of digitalization on the marketing and sales integration

Significant role in terms of digital transformation in the surveyed companies. Within the interview, all experts agreed that due to digital transformation the "structure" of the collaboration is influenced since the boundaries between the departments are loosened up and the marketing and sales departments come closer together. When asked regarding the "process/structure", the interviewees agreed upon general consensus that this mechanism is influenced by digital transformation as well. The focus hereby lies on information systems and communication.

Furthermore, it is crucial to mention that a generational conflict occurs which relates to this research question. The fear of dealing with digital transformation is especially present among older colleagues, regardless of the departments. These generational conflicts present a pressing



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challenge to corporations as currently 15.2% of the German workforce are over 55 years old (Statistisches Bundesamt, 2019) and thus are of risk of not being adequately equipped to handle the digital transformation taking place (Vogels, 2019). This represents challenges with regard to the marketing and sales collaboration. According to the respondents of the semi-structured interviews, the "culture" is affected due to the trend as well. According to marketing expert A "the culture of the entire company has changed, so that our brand stands no longer for a leading manufacturer of sport cars, but understands itself as a leading provider of exclusive mobility in the premium segment which encourages business areas such as smart mobility." Expert B confirmed these changes but sees a different root cause, "I do not necessarily believe that digital transformation is changing the culture. I think it is the other way around." The last type of integrated mechanisms is called "people". As well as the other factors, this one is influenced by the digital transformation, although one respondent confirmed only an indirect influence. In accordance with earlier statements expert argued further that especially due to different ageing structures people react differently to digital transformation and therefore, influence the progress of the trend. "You often notice that especially older people are more afraid of digital transformation, of changes, of new systems and processes than younger people." These findings expand the existing literature which has been focused only on "structures", "process/system", "culture" and "people" as crucial factors for the sales and marketing integration.

This study with the help of the interviewed experts of German organizations, suggest that digital transformation affects these mechanisms significantly and therefore, the marketing and sales integration. In addition to the investigation of the influence of digital transformation, the reliability of the model is represented as all experts unanimously agreed that all four categories influence the marketing and sales integration. Furthermore, they agree that the better the marketing-and sales integration the better the organizational performance. This is in line with Rouziès, et al. (2005) and links the literature to practice. To determine which of the four categories is influenced the most by the digital transformation the interviewees were asked to rank their significance. None of the categories received the majority of the experts. However, all types were determined at least once as most influenced. This indicates that each type plays a crucial role in terms of digital transformation. Since "structure" and "process/system" received 4 out of 6 votes in total, a tendency toward a higher significance of these two types is evident.

The fourth research question about challenges or opportunities for the collaboration between marketing and sales due to digital transformation were addressed with interview question. The results showed that all participants agreed that there were challenges as well as opportunities for the marketing and sales collaboration due to digital transformation. Sales expert D stated, "at the moment, it is more challenging because huge efforts are needed to implement it. But for the future the collaboration will be improved significantly." Thereby, it is crucial to mention that although 3 out of 6 respondents argued that challenges are predominate nowadays, opportunities will prevail in the future. Marketing expert C stated, "furthermore, due to the increased usage of data-driven information, the customers are becoming more transparent" and "especially the measurability of objectives is crucial and in my opinion a big chance!" The comparison with the literature detected similarities in terms of the challenges due to digital transformation. However, the semi-structured expert interviews expanded the literature by providing further insights into challenges as well as opportunities with practical applicability for the collaboration of marketing and sales.

Furthermore, the data shows that how the departments deal with digital transformation is also influenced by generation-related aspects. The experts highlighted extensively that the "fear of control" or "fear of new digital programs" especially among older colleagues adversely affects the impact on collaboration in terms of digital transformation. Since this has not been a topic of discussion in the literature, it can be seen as an opportunity for future research. All in



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all, it can be concluded that digitalization can be an asset as well as a challenge for the collaboration of marketing and sales.

5. Conclusion

The findings of the semi-structured expert interviews enhance the existing literature of digital transformation and its influence on the marketing and sales integration. Through our analysis, we have been able to identify four key theoretical implications:

- (1) Digitalization in marketing and sales simplifies the day-to-day business, making it more quantifiable and thus transparent. However, it has not yet been fully accepted and widely adapted within the examined companies.
- (2) Digitalization enhances collaboration between marketing and sales department due to soften department borders.
- (3) Leadership is required to handle the generation-related conflicts, as fear of dealing with digital transformation is especially present among older colleagues.
- (4) Structure and process and system have a significant impact on the sales and marketing integration and thus an impact on organizational performance.

In addition to the theoretical contributions, this paper also introduces managerial implications to manage the challenges digitalization might impose on the marketing and sales integration. Firstly, it is of utmost importance that employees are trained appropriately in their usage of digital technologies. This can minimize generational conflict and lead to a stimulated communication across departments.

Secondly, the availability of systems needs to be guaranteed so that the opportunities the system provides can be fully leveraged. One of these opportunities is the increased transparency which might lead to an increase in fairness perception.

Lastly, digitalization creates new leadership challenges, which need to be addressed adequately.

Based on the presented key findings the researchers would guide further research to deepen the understanding of the collaboration of marketing and sales departments. There are various suggestions for related future research that occurred during the conduct of this study. First, the research area of digital transformation and its influence on the marketing and sales collaboration has not been entirely covered yet, due to its innovative nature and pace of change. Second, since the implications of digital transformation are different across countries and industries it is recommended to conduct similar studies in different countries and industries to test for national and cultural differences. Due to the small sample size and the explorative nature of this study, generalizability is low and should be examined by future researcher. Another limitation is given by the virtual context of the data collection, which might have inhibited the observation of e.g. non-verbal cues.

References

- Baden-Württemberg State Ministry. (2020). Home to commerce and industry. Retrieved from www.baden-wuerttemberg.de/en/our-state/business-location/
- Baldwin, H. (2014). Ready for Digital Transformation?, 48(9), 22–24.
- Bryman, A., & Bell, E. (2015). Business research methods, 4 ed., Oxford: Oxford University Press.
- Dawes, P. L., & Massey, G. R. (2005). Antecedents of conflict in marketing's cross-functional relationship with sales. *European Journal of Marketing*, 39(11/12), 1327–1344. doi: <https://doi.org/10.1108/03090560510623280>.
- Gimpel, H., & Röglinger, M. (2015). Digital transformation: Changes and chances – Insights based on an empirical study. Project Group Business and Information Systems Engineering (BISE) of the Fraunhofer Institute for Applied Information Technology FIT, Augsburg/Bayreuth. Retrieved from www.fim-rc.de/wp-content/uploads/Fraunhofer-Studie_Digitale-Transformation.pdf



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- Gorajia, J. (2016). Sales and marketing in a Digital Transformation Reality. *SMT: Surface Mount Technology*, 31(12), 12-18.
- Hauer, G., Harte, P., & Kacemi, J. (2018). An exploration of the impact of industry 4.0 approach on corporate communication in the German manufacturing industry. *International Journal of Supply Chain Management*, 7(4), 125-131.
- Heinze, J., & Matt, C. (2018). Reducing the service deficit in M-Commerce: How service-technology fit can support digital sales of complex products. *International Journal of Electronic Commerce*, 22(3), 386-418. doi: <https://doi.org/10.1080/10864415.2018.1462940>.
- Homburg, C., & Jensen, O. (2007). The thought worlds of marketing and sales: Which differences make a difference? *Journal of Marketing*, 71(3), 124-142. doi: <https://doi.org/10.1509/jmkg.71.3.124>.
- Höttges, T. (2017). Foreword. In F. Abolhassan, (Ed.), *The drivers of digital transformation: Why there's no way around the cloud*, Basel: Springer International Publishing Switzerland. 1, 5-9.
- Hughes, D. E., Le Bon, J., & Malshe, A. (2012). The marketing-sales interface at the interface: Creating market-based capabilities through organizational synergy. *Journal of Personal Selling & Sales Management*, 32(1), 57-72. doi: <https://doi.org/10.2753/PSS0885-3134320106>.
- Jadhav, G.G., Gaikwad, S.V. and Bapat, D. (2023). "A systematic literature review: digital marketing and its impact on SMEs", *Journal of Indian Business Research*, Vol. 15 No. 1, pp. 76-91. <https://doi.org/10.1108/JIBR-05-2022-0129>
- Keszey, T., & Biemans, W. (2016). Antecedents and outcomes of sales-marketing encroachment. *Journal of Business Research*, 69(9), 3698-3706. doi: <https://doi.org/10.1016/j.jbusres.2016.03.032>.
- Kotler, P., Armstrong, G., Harris, L. C., & Piercy, N. (2016). *Principles of marketing European edition*, Harlow: Pearson Education Limited.
- Kotler, P., Rackham, N., & Krishnaswamy, S. (2006). Ending the war between sales and marketing. *Harvard Business Review*, 7/8, 68-78.
- Krafft, M., & Haase, K. (2004). Integration von marketing und vertrieb. *Thesis*, 21(1), 13-18.
- Lamberton, C., & Stephen, A. T. (2016). A thematic exploration of digital, social media, and mobile marketing: Research evolution from 2000 to 2015 and an agenda for future inquiry. *Journal of Marketing*, 80(6), 146-172. doi: <https://doi.org/10.1509/jm.15.0415>.
- Laverie, D., Humphrey, W., Manis, K. T., & Freberg, K. (2020). The digital era has changed marketing: A guide to using industry certifications and exploration of student perceptions of effectiveness. *Marketing Education Review*, 30(1), 57-80. doi: <https://doi.org/10.1080/10528008.2020.1716806>.
- Le Meunier-FitzHugh, K., & Douglas, T. (2016). *Achieving a strategic sales focus: Contemporary issues and future challenges*, Oxford: Oxford University Press.
- Le Meunier-FitzHugh, K., & Lane, N. (2009). Collaboration between sales and marketing, market orientation and business performance in business-to-business organisations. *Journal of Strategic Marketing*, 17(3-4), 291-306. doi: <https://doi.org/10.1080/09652540903064860>.
- Le Meunier-Fitzhugh, K., & Massey, G. R. (2019). Improving relationships between sales and marketing: The relative effectiveness of cross-functional coordination mechanisms. *Journal of Marketing Management*, 35(13-14), 1267-1290. doi: <https://doi.org/10.1080/0267257X.2019.1648310>.
- Le Meunier-FitzHugh, K., & Piercy, N. F. (2007). EXploring collaboration between sales and marketing. *European Journal of Marketing*, 41(7/8), 939-955. doi: <https://doi.org/10.1108/03096850710752465>.



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A Study of Customer Awareness About Environmentally Sustainable Green
Products and Impact Of Green Marketing On Consumer Purchasing Decisions in
Eastern Pune City (Spread Across Pune Nagar Road)

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Asst.Prof. Shilpa Khade



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A STUDY OF CUSTOMER AWARENESS ABOUT ENVIRONMENTALLY SUSTAINABLE GREEN PRODUCTS AND IMPACT OF GREEN MARKETING ON CONSUMER PURCHASING DECISIONS IN EASTERN PUNE CITY (SPREAD ACROSS PUNE NAGAR ROAD).

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Abstract

Green products and green marketing are the keywords of today's era across the globe. Green marketing which is highly based on five 'R's Refuse, Reduce, Reuse, Repurpose, Recycle which helps to support environment sustainability.

Green marketing refers to the promotion of ecological-friendly products and services. It has become increasingly important in recent years as consumers become more aware of the impact of their purchasing decisions on the environment. The impact of green marketing on consumers can be significant in several ways, including increased awareness, influence on purchasing decisions, changes in consumer behavior, and increased competition among companies. Green marketing, also known as environmental marketing, involves promoting environmentally-friendly products and services. The objective of this study was to examine the awareness of green marketing among consumers and its impact on their purchasing decisions. The results of the study showed that green marketing has increased consumer awareness about environmental issues and the impact of their purchasing decisions on the environment. The findings also suggest that consumers are becoming more environmentally conscious and that green marketing is influencing their purchasing decisions. The study highlights the importance of green marketing in promoting sustainable consumption and production and highlights the potential benefits it can bring to both the environment and consumers. The study concludes that green marketing can play a significant role in promoting environmental sustainability and that companies should take advantage of this trend by offering environmentally-friendly products and services.

This paper aims to provide an overview of the impact of green marketing on consumers and the potential benefits it can bring to both the environment and consumers. The findings suggest that green marketing can promote sustainable consumption and production, and that it has the potential to positively impact the environment and the lives of consumers.

Keywords: Green marketing, Consumer behavior, Sustainability, environment friendly, impact, awareness

Introduction

The American Marketing Association defines green marketing as "the investigation of the positive and negative effects of marketing activities on pollution, energy depletion, and non-energy resource depletion." The promotion of ecologically friendly products and services is referred to as green marketing. It has become increasingly important in recent years as consumers become more aware of the impact of their purchasing decisions on the environment. The impact of green marketing on consumers can be significant in several ways, including increased awareness, influence on purchasing decisions, changes in consumer behavior, and increased competition among companies. This paper aims to provide an overview of the impact of green marketing on consumers and the potential benefits it can bring to both the environment and consumers. The findings suggest that green marketing can promote sustainable consumption and production and that it has the potential to positively impact the environment and the lives of consumers.



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Green marketing refers to the promotion of ecological-friendly products and services. The objective of this study was to examine the effect of green marketing on brand image and buying behavior. The findings of the study showed that green marketing has a positive effect on brand image, as it can enhance a company's reputation and credibility by demonstrating its commitment to environmental sustainability. The study also found that green marketing can influence consumer purchasing decisions, as consumers are becoming more environmentally conscious and are more likely to choose products that are marketed as being environmentally-friendly. The results highlight the importance of green marketing in promoting sustainable consumption and production and show that it can bring significant benefits to both the environment and companies. The study concludes that companies should invest in green marketing initiatives to improve their brand image and appeal to environmentally-conscious consumers.

The 21st century has seen the common usage of terms like global warming, carbon credits, ozone depletion, environmental hazards, and environment impact assessment, which is a sign of an environmentally conscious society. When society suffers the negative consequences of environmental degradation, it becomes more concerned about the natural environment. One cause of this degradation is the problems that arise from the mass production, consumption, and marketing of environmentally irresponsible products. As a result, businesses have begun to change their behaviour in an attempt to address these 'new' societal concerns. Traditional marketing comprises selling products and services that satisfy consumer needs at reasonable prices, but green marketing must also define "what is green" and produce and sell green products.

Objectives:

1. To investigate consumer awareness of eco-friendly or green products and green marketing.
2. To study the attitude of consumers towards eco- friendly or green products.
3. To assess the impact of green marketing on consumer buying behavior.

Hypothesis:

- 1.H0: Consumers are Aware about the green products
H1: Consumers are not Aware about the green products
- 2.H0: consumer buying behavior is affected by green marketing
H1: consumer buying behavior is not affected by green marketing

Literature review

Definition

1. **Green marketing**-Green marketing, according to Investopedia, is the practice of developing and advertising products based on their actual or perceived environmental sustainability.
2. The promotion of environmentally friendly products, services, and initiatives is known as green marketing (or environmental marketing). Green marketing, in particular, refers to a wide range of environmentally friendly practices and strategies. Some examples of green marketing include:
 - Making environmentally friendly products
 - Using environmentally friendly product packaging made of recycled materials
 - lowering greenhouse gas emissions from manufacturing processes
 - Adopting environmentally friendly business practices
 - Marketing efforts aimed at communicating the environmental benefits of a product
 - Putting profits into renewable energy or carbon offset projects
3. Green marketing refers to the promotion of environmentally friendly products and services, along with their production and distribution methods, to consumers with the goal of reducing negative impacts on the environment. This concept includes all marketing activities that



emphasize the environmentally responsible aspects of a product or service and aims to meet the growing demand for eco-friendly products.

- **Consumer Behavior**-Consumer behavior refers to the actions and decision-making processes of individuals and households when purchasing goods and services. It is a field of study that aims to understand how consumers perceive, choose, use, and dispose of products and services. Consumer behavior analysis takes into account various factors such as cultural influences, personal values, perception, motivation, and attitudes, as well as the effects of marketing and advertising. The study of consumer behavior helps companies develop marketing strategies that effectively reach and influence target audiences, leading to increased sales and customer loyalty.
- **Sustainability**-Sustainability is a concept that involves the responsible use of natural resources to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. It encompasses environmental, social, and economic considerations and seeks to balance these factors in a way that benefits both individuals and society as a whole. In practical terms, sustainability involves reducing waste and pollution, conserving natural resources, promoting social equity, and ensuring economic viability.
- **Green product**-A product that consumers prefer because it helps to protect the environment during the manufacturing, use, and disposal of the product. Green products are typically organic, ecological, recyclable, and energy-saving.

Green Purchase Behaviour: Customer Awareness-According to SolarCity (2013), in the current market, consumers are looking for environmentally friendly products and brands. According to the survey, the majority of consumers are interested in sustainable or "green" products.

According to Laroche (2001), knowledge is the most influential factor when making decisions. It was discovered that consumers with more knowledge were willing to pay more for environmentally friendly products. As a result, eco-literacy refers to consumers' ability to recognise or define a variety of ecological symbols, concepts, and behaviours.

According to Govender and Govender (2016), studies have shown that consumers are aware that green marketing became popular in the late 1980s and early 1990s. Their purchasing and consumption habits have a direct impact on the environment. One of the difficulties that The consumer's attitude does not match their purchasing behaviour. Green awareness and engagement, according to Green Gauge, do not always translate into green purchases. There could be a variety of reasons or motivations for making different purchases or switching brands. They include the product's price, health and safety, available discounts, convenience, and style. There is also a significant gap between product information and product awareness. Consumers must be kept up to date on new technologies and product categories. According to research, Consumers nowadays rely on social media and online reviews.

Around 70% of consumers rely on other consumers' online opinions, with "recommendations from people I know" being the most trusted source. According to statistics, approximately 29% of smart phone users have downloaded apps related to their environmental impact. According to Banerjee (2012), the consumer products firm seventh generation, which is a pioneer in marketing green products, has seen a significant increase in the sale of green products. The company used blogs and print media to reach out to college students in order to increase their demand for green products. The first book, Ecological Marketing, was the result of a workshop on "Ecological Marketing" held by the American Marketing Association (AMA) first in 1975. Green marketing has been prominent since the early 1990s. Green consumers and green consumerism were discussed in the 1970s and 1980s. Henion and Kinnear (1976) defined green consumers as environmentally conscious consumers, whereas Antil (1984) defined green consumerism as a specific type of socially conscious consumer.



behaviour with a primary focus on environmental protection. Green consumerism has been described as a "pro-social" mode of consumption (Weiner and Doescher, 1991).

Green marketing, according to Michael Polonsky (1994), is "all activities designed to generate and facilitate revenue." Studies on consumer awareness of green products have shown that awareness levels vary depending on individual factors such as age, education, and income. Research has also found that awareness alone does not necessarily translate into purchasing behavior, as consumers may be concerned with the additional cost of green products or unsure of their effectiveness.

Another key finding from the literature is that marketing and advertising play a significant role in shaping consumer awareness

Research Methodology

Primary and secondary data collection both methods have been used for this study. The researcher used structured interview schedules to measure consumer attitudes toward green marketing. Due to time constraints, primary data was collected from respondents in eastern Pune City using a questionnaire designed for a sample of 50 respondents via a mail, survey. The researcher used a convenience sampling method to select samples from the eastern part of Pune City. For analysis of the data collected, the tabulation and graphical representation method are used for this study.

Data Collection, Analysis and Interpretation

Questionnaire to assess consumer awareness of green products:

1. How often do you purchase green products?

- a. Rarely b. Sometimes c. Often d. Almost always

1. How often do you purchase green products?		
Responses	Number	Percentage%
a. Never	10	20
b. Sometimes	13	26
c. Often	15	30
d. Almost always	22	44
TOTAL	50	100

Chart Title

Legend: a. Never b. Sometimes c. Often d. Almost always

Interpretation-According to responses customers are keen to purchase green product & there is a very good awareness about green products in customer's mind.

2. How important are environmental concerns to you when making purchasing decisions?

- a. Not important b. Somewhat important c. Important d. Very important

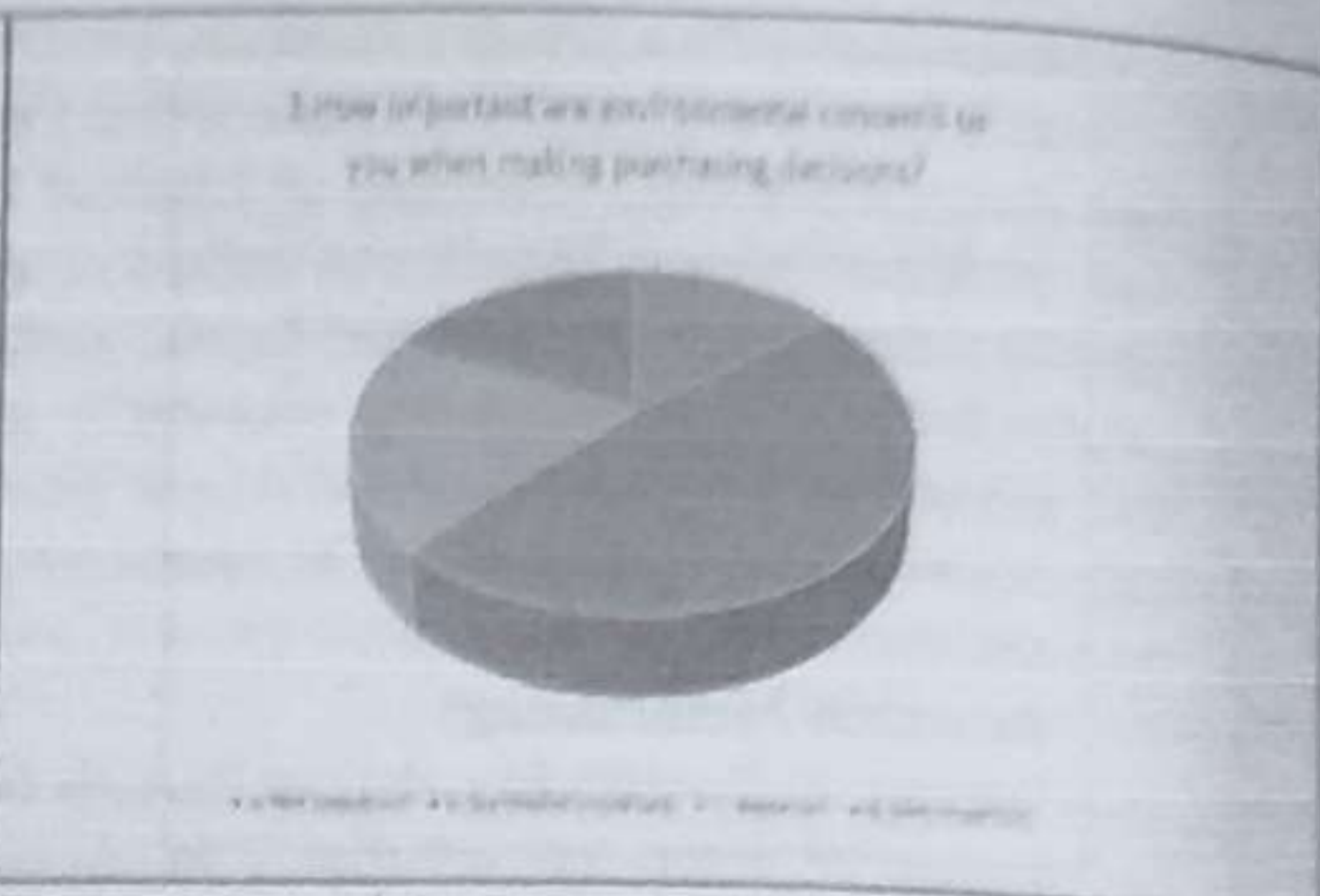
2. How important are environmental concerns to you when making purchasing decisions?		
Responses	Number	Percentage%
a. Not important	7	14



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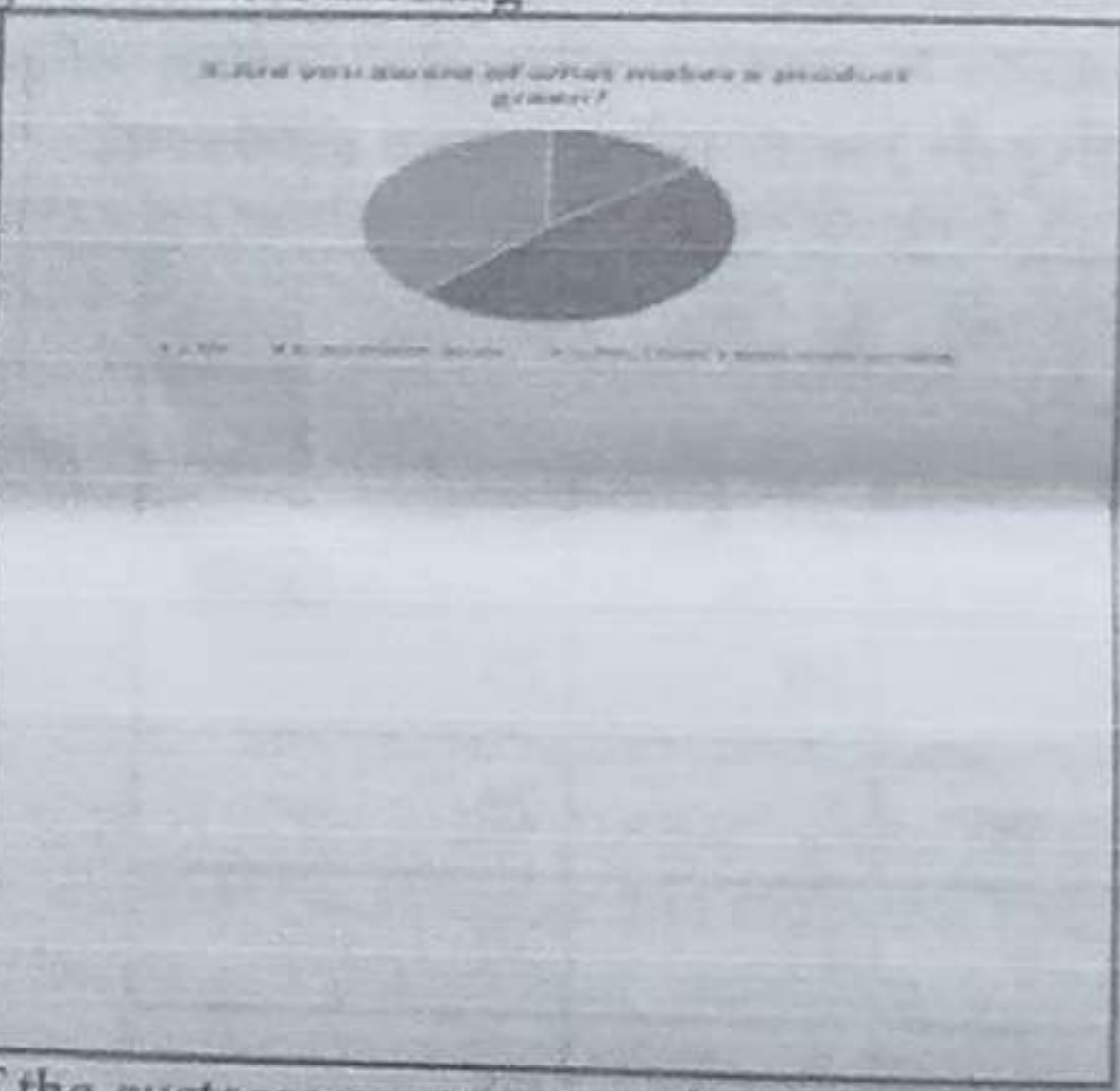
b. Somewhat important	24	48
c. Important	10	20
d. Very important	9	21
TOTAL	50	100



Interpretation-According to responses > 41% customers pays good importance to environmental concerns while making their purchase decisions. There are still 59% of the customers who are yet to get convinced strongly.

3. Are you aware of what makes a product green?
 a. No b. Somewhat aware c. Yes, I have a good understanding

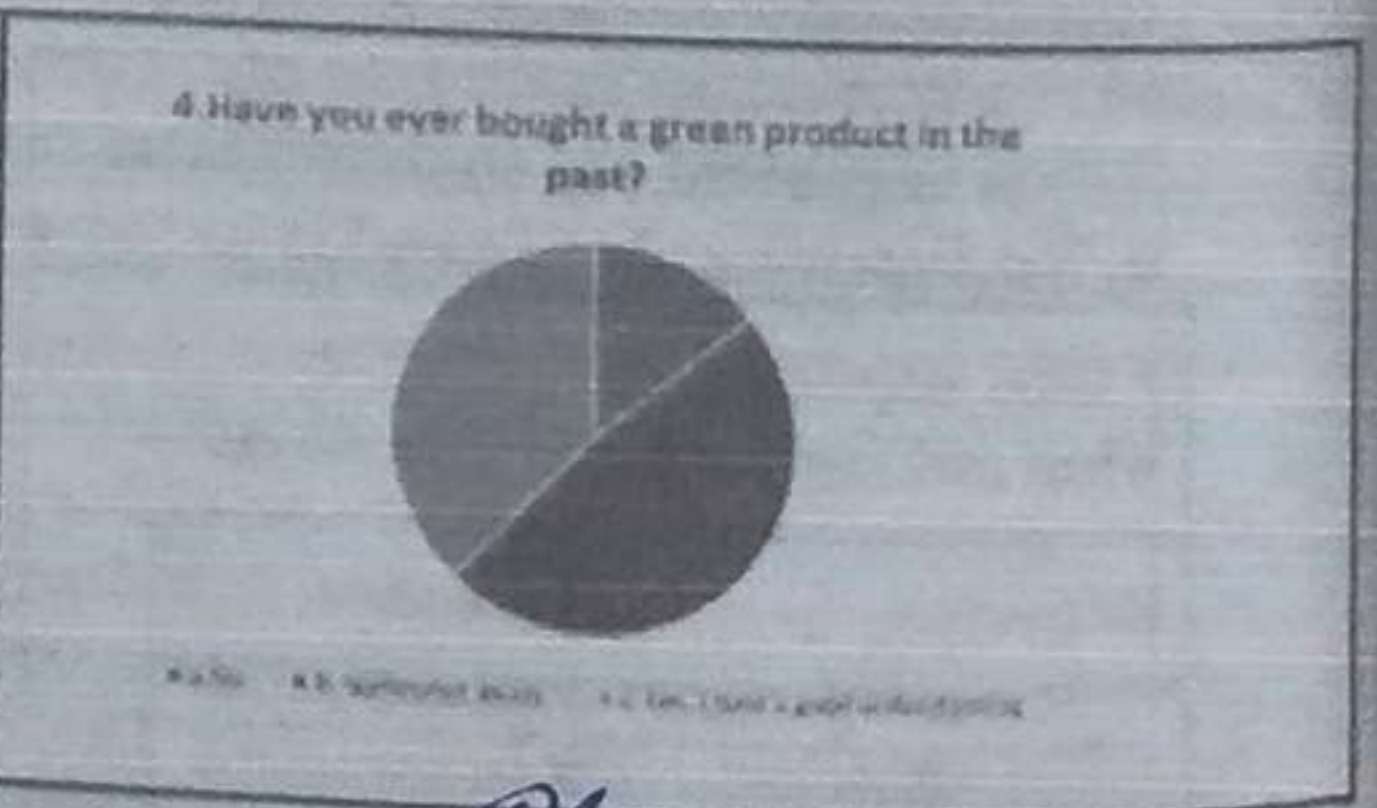
Responses	Number	Percentage
a. No	7	14
b. Somewhat aware	24	48
c. Yes, I have a good understanding	19	38
TOTAL	50	100



Interpretation-According to responses most of the customers are aware about what makes the product green.

4. Have you ever bought a green product in the past?
 a. No b. Yes, but I don't regularly buy green products c. Yes, I try to buy green products whenever possible

Responses	Number	Percentage%
a. No	7	14
b. Yes, but I don't regularly buy green products	20	40



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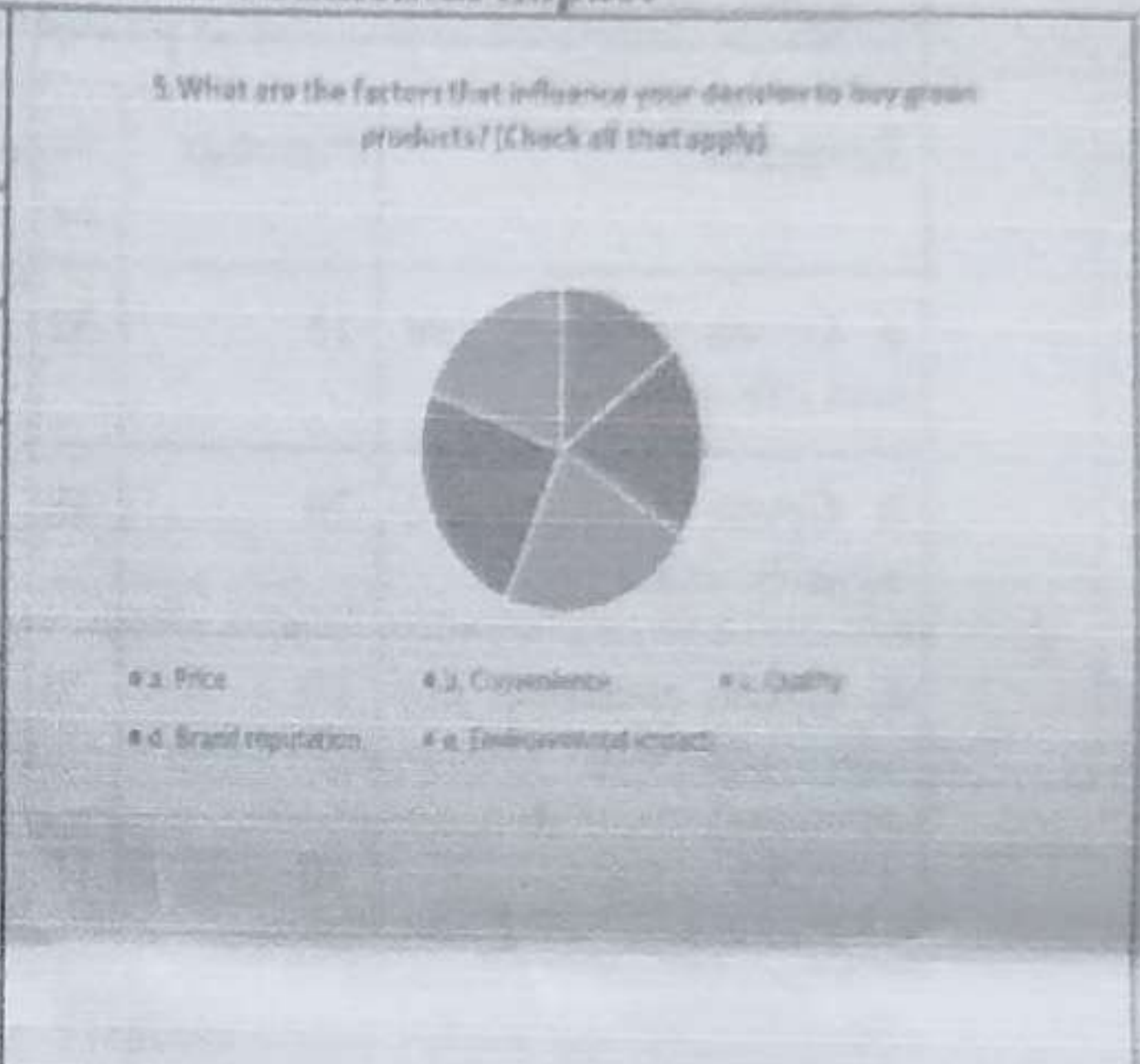
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c. Yes, I try to buy green products whenever possible	23	46
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Interpretation-According to responses > 46% customers tries to buy green products whenever possible. There are significant customers who does not buy the product regularly but keeps buying occasionally.

5. What are the factors that influence your decision to buy green products? (Check all that apply)
 a. Price b. Convenience c. Quality d. Brand reputation e. Environmental impact

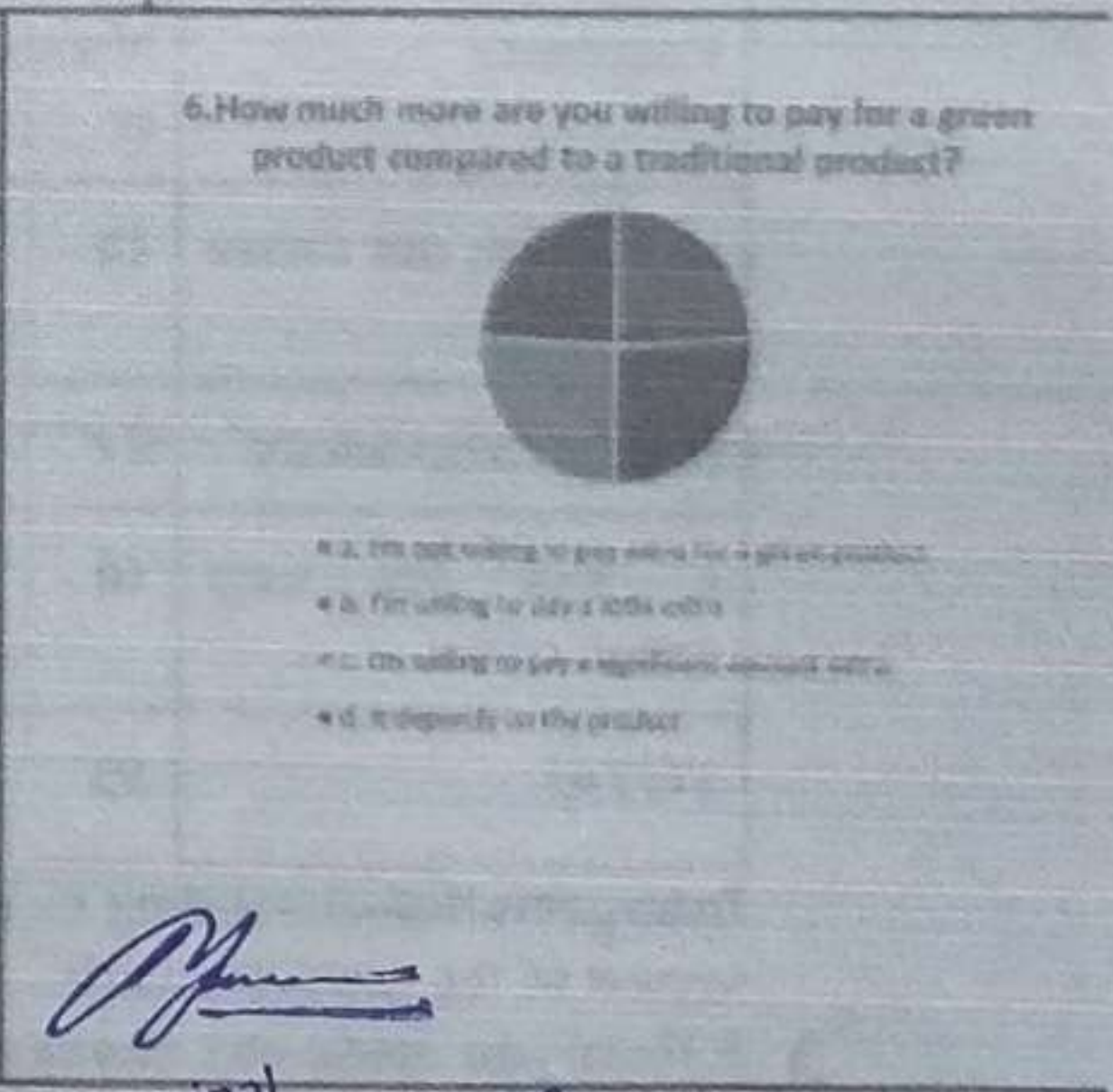
Responses	Number	Percentage%
a. Price	09	18
b. Convenience	12	24
c. Quality	14	28
d. Brand reputation	15	30
e. Environmental impact	12	24
TOTAL	50	100



Interpretation-According to responses customers pays most attention to the brand while buying green products followed by quality, convenience & environmental impact. Price does not seems to be impacting their decisions significantly.

6. How much more are you willing to pay for a green product compared to a traditional product?
 a. I'm not willing to pay extra for a green product b. I'm willing to pay a little extra
 c. I'm willing to pay a significant amount extra d. It depends on the product

Responses	Number	Percentage %
a. I'm not willing to pay extra for a green product	12	24
b. I'm willing to pay a little extra	13	26
c. I'm willing to pay a significant amount extra	13	26
d. It depends on the product	12	24



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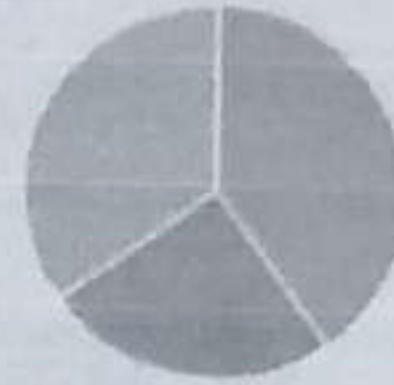
TOTAL	50	100
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Interpretation-According to responses customers are willing to pay the premium for good green products.

7. How do you perceive the effectiveness of green products compared to traditional products?
 a. Green products are less effective b. Green products are equally effective c. Green products are more effective

7. How do you perceive the effectiveness of green products compared to traditional products?		
Responses	Number	Percentage %
a. Green products are less effective	16	32
b. Green products are equally effective	24	48
c. Green products are more effective	10	20
TOTAL	50	100

7. How do you perceive the effectiveness of green products compared to traditional products?



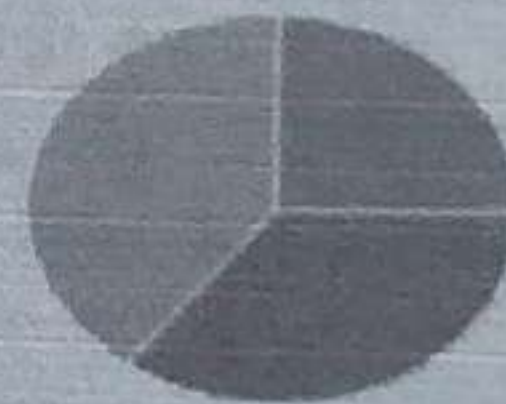
a. Green products are less effective b. Green products are equally effective
 c. Green products are more effective

Interpretation-According to responses customers are of the opinion that green products are equally effective in their performance against conventional products.

8. Are you aware of the environmental impact of the products you use?
 a. No, I'm not aware of it b. Somewhat aware c. Yes, I'm very aware of it

8. Are you aware of the environmental impact of the products you use?		
Responses	Number	Percentage %
a. No, I'm not aware of it	10	20
b. Somewhat aware	24	48
c. Yes, I'm very aware of it	16	32
TOTAL	50	100

8. Are you aware of the environmental impact of the products you use?



a. No, I'm not aware of it b. Somewhat aware c. Yes, I'm very aware of it

Interpretation-According to responses most of the customers are well aware of the environmental impact of the green products.

9. Have you made any changes in your lifestyle to reduce your impact on the environment?

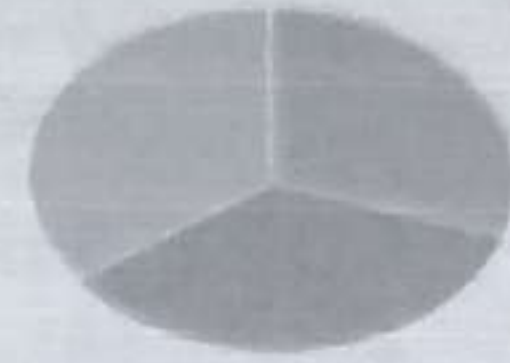


a. No, I haven't made any changes b. Yes, I've made a few changes c. Yes, I've made significant changes

9. Have you made any changes in your lifestyle to reduce your impact on the environment?

Responses	Number	Percentage %
a. No, I haven't made any changes	12	24
b. Yes, I've made a few changes	14	28
c. Yes, I've made significant changes	24	48
TOTAL	50	100

9. Have you made any changes in your lifestyle to reduce your impact on the environment?



a. No, I haven't made any changes b. Yes, I've made a few changes c. Yes, I've made significant changes

Interpretation-According to responses customers have made significant changes in their lifestyle to reduce their impact on the environment.

10. Do you think it's important for companies to produce environmentally friendly products?

a. No, I don't think it's important b. Somewhat important c. Important d. Very important

10. Do you think it's important for companies to produce environmentally friendly products?

Responses	Number	Percentage %
a. No, I don't think it's important	10	20
b. Somewhat important	12	24
c. Important	12	24
d. Very important	16	32
Total	50	100

10. Do you think it's important for companies to produce environmentally friendly products?



a. No, I don't think it's important b. Somewhat important c. Important d. Very important

Interpretation-According to responses most of the customers believe that it is important for companies to produce environmentally friendly products.

11. How often do you purchase green products?

a. Rarely b. Sometimes c. Often d. Almost always



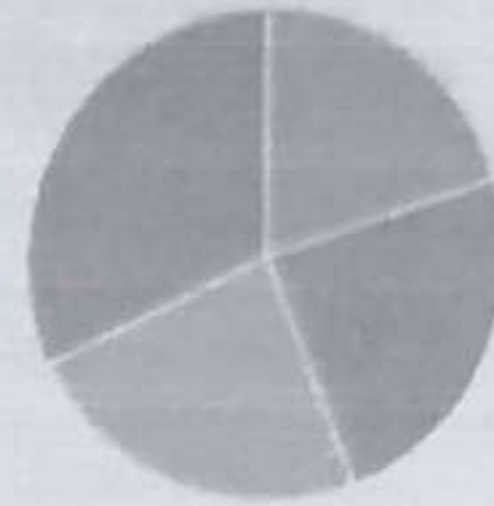
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11. How often do you purchase green products?

Responses	Number	Percentage%
a. Rarely	10	20
b. Sometimes	12	24
c. Often	12	24
d. Almost always	16	32
Total	50	100

11. How often do you purchase green products?



a. Rarely b. Sometimes c. Often d. Almost always

Interpretation-According to responses customers are regularly purchasing green products.

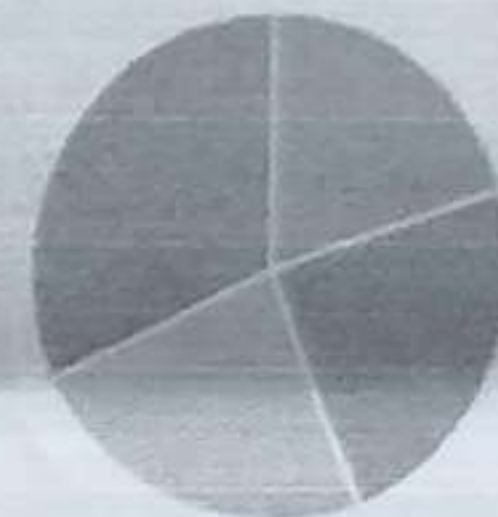
12. How important are environmental concerns to you when making purchasing decisions?

a. Not important b. Somewhat important c. Important d. Very important

12. How important are environmental concerns to you when making purchasing decisions?

Responses	Number	Percentage
a. Not important	10	20
b. Somewhat important	12	24
c. Important	12	24
d. Very important	16	32
Total	50	100

12. How important are environmental concerns to you when making purchasing decisions?



a. Not important b. Somewhat important c. Important d. Very important

Interpretation-According to responses customers are giving significant importance to environmental concerns while making their purchasing decisions regarding green products.

13. Are you influenced by green marketing campaigns?

a. No, I'm not influenced by them b. Somewhat influenced c. Yes, I'm influenced by them

13. Are you influenced by green marketing campaigns?

Responses	Number	Percentage
a. No, I'm not influenced by them	10	20
b. Somewhat influenced	21	42
c. Yes, I'm influenced by them	19	38
Total	50	100

13. Are you influenced by green marketing campaigns?



a. No, I'm not influenced by them b. Somewhat influenced c. Yes, I'm influenced by them



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Interpretation-According to responses customers are very much influenced due to the green marketing campaigns.

14. Have you ever changed your purchasing behavior as a result of a green marketing campaign?
 a. No, I haven't changed my behavior b. Yes, I've changed my behavior in a small way c. Yes, I've changed my behavior significantly

14. Have you ever changed your purchasing behavior as a result of a green marketing campaign?			14. Have you ever changed your purchasing behavior as a result of a green marketing campaign?	
Responses	Number	Percentage		
a. No, I haven't changed my behavior	10	20	a. No, I haven't changed my behavior	
b. Yes, I've changed my behavior in a small way	21	42	b. Yes, I've changed my behavior in a small way	
c. Yes, I've changed my behavior significantly	19	38	c. Yes, I've changed my behavior significantly	
Total	50	100		

Interpretation-According to responses customers are willing to change their purchasing decisions based on green marketing campaign.

15. Do you think green marketing campaigns are credible and trustworthy?
 a. No, I don't think they are credible b. Somewhat credible c. Yes, I think they are credible

15. Do you think green marketing campaigns are credible and trustworthy?			15. Do you think green marketing campaigns are credible and trustworthy?	
Responses	Number	Percentage		
a. No, I don't think they are credible	10	20	a. No, I don't think they are credible	
b. Somewhat credible	21	42	b. Somewhat credible	
c. Yes, I think they are credible	19	38	c. Yes, I think they are credible	
Total	50	100		

Interpretation-According to responses customers are thinking that green marketing campaigns are reasonably credible.

16. How much influence do green marketing campaigns have on your purchasing decisions?
 a. No influence b. Little influence c. Significant influence

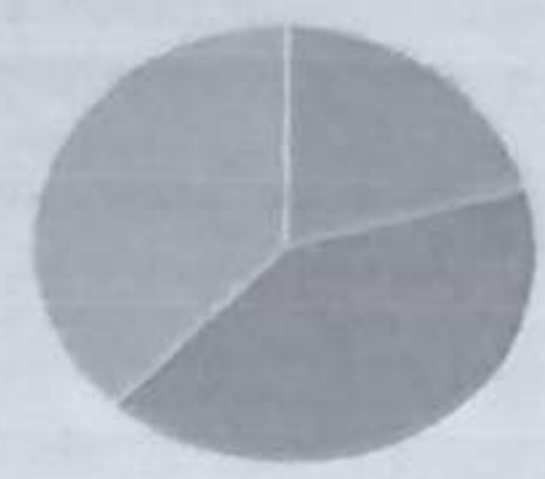
16. How much influence do green marketing campaigns have on your purchasing decisions?	
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Responses	Number	Percentage (%)
a. No influence	10	20
b. Little influence	21	42
c. Significant influence	19	38
Total	50	100

16. How much influence do green marketing campaigns have on your purchasing decisions?



a. No influence b. Little influence c. Significant influence

Interpretation-According to responses customer's purchase decision making is very well influenced due to green marketing campaigns.

17. Are you more likely to purchase a green product as a result of a green marketing campaign?

a. No, I'm not more likely to purchase it b. Somewhat more likely c. Yes, I'm more likely to purchase

Responses	Number	Percentage
a. No, I'm not more likely to purchase it	10	20
b. Somewhat more likely	18	36
c. Yes, I'm more likely to purchase it	22	44
Total	50	100

17. Are you more likely to purchase a green product as a result of a green marketing campaign?



a. No, I'm not more likely to purchase it b. Somewhat more likely c. Yes, I'm more likely to purchase it

Interpretation-According to responses customers are willing to purchase a green product as a result of marketing campaign.

18. How effective do you think green marketing campaigns are in promoting environmentally friendly products? a. Not effective b. Somewhat effective c. Very effective

Responses	Number	Percentage
a. Not effective	10	20
b. Somewhat effective	18	36
c. Very effective	22	44
Total	50	100

18. How effective do you think green marketing campaigns are in promoting environmentally friendly products?



a. Not effective b. Somewhat effective c. Very effective



Interpretation- According to responses green products marketing campaigns are highly effective.

19. Have you ever bought a green product because of a green marketing campaign?

- a. No, I haven't bought a green product because of a marketing campaign
- b. Yes, I've bought a green product because of a marketing campaign

19. Have you ever bought a green product because of a green marketing campaign?

Responses	Number	Percentage
a. No, I haven't bought a green product because of a marketing campaign	21	42
b. Yes, I've bought a green product because of a marketing campaign	29	58
Total	50	100

19. Have you ever bought a green product because of a green marketing campaign?



* a. No, I haven't bought a green product because of a marketing campaign
 * b. Yes, I've bought a green product because of a marketing campaign

Interpretation- According to responses most of the customers have bought green products because of a effective green campaign.

20. Do you think green marketing campaigns are effective in raising awareness about environmental issues?

- a. No, I don't think they are effective
- b. Somewhat effective
- c. Very

20. Do you think green marketing campaigns are effective in raising awareness about environmental issues?

Responses	Number	Percentage
a. No, I don't think they are effective	08	16
b. Somewhat effective	19	38
c. Very	23	36
Total	50	100

20. Do you think green marketing campaigns are effective in raising awareness about environmental issues?



* a. No, I don't think they are effective
 * b. Somewhat effective
 * c. Very

Interpretation- According to responses customers believe that green marketing campaigns are highly effective in raising awareness about environmental issues.

Conclusion

In this study according to responses customers are keen to purchase green product & there is a very good awareness about green products in customer's mind and > 41% of customers pays good to environmental concerns while making their purchase decisions. There are still 59% of the customers who are yet to get convinced strongly.

According to responses most of the customers have bought green products because of an effective green campaign. As well customers are willing to change their purchasing decisions based on green marketing campaigns as well customers are giving significant importance to environmental concerns while making their purchasing decisions regarding green products.

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Customers are of the opinion that green products are equally effective in their performance against conventional products. According to responses customers are regularly purchasing green products. According to responses customers pay most attention to the brand while buying green products followed by quality, convenience & environmental impact. According to the responses collected -consumers are aware of green products and consumer buying behavior is affected by green marketing campaign

References

Book

- Grant John (2007), The green Marketing Manifesto, John Wiley and Sons Ltd accessed via internet 29on 14th Jan 2011

Website

- https://www.researchgate.net/publication/261031261_A_Study_of_Awareness_for_Green_Marketing
- https://www.linkedin.com/pulse/why-your-company-should-care-planet-how-show-ventureprk?trk=pulse-article_more-articles_related-content-card
- https://www.researchgate.net/publication/261031261_A_Study_of_Awareness_for_Green_Marketing
- https://www.linkedin.com/pulse/why-your-company-should-care-planet-how-show-ventureprk?trk=pulse-article_more-articles_related-content-card
- https://www.linkedin.com/pulse/why-your-company-should-care-planet-how-show-ventureprk?trk=pulse-article_more-articles_related-content-card
- <https://www.igi-global.com/dictionary/consumer-behavior/5486>

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- How often do you purchase green products?
a. Rarely b. Sometimes c. Often
d. Almost always
- How important are environmental concerns to you when making purchasing decisions?
a. Not important b. Somewhat important c. Important d. Very important
- Are you aware of what makes a product green?
a. No b. Somewhat aware c. Yes, I have a good understanding
- Have you ever bought a green product in the past?
a. No b. Yes, but I don't regularly buy green products c. Yes, I try to buy green products whenever possible
- What are the factors that influence your decision to buy green products? (Check all that apply)
a. Price b. Convenience c. Quality d. Brand reputation e. Environmental impact
- How much more are you willing to pay for a green product compared to a traditional product?
a. I'm not willing to pay extra for a green product b. I'm willing to pay a little extra c. I'm willing to pay a significant amount extra d. It depends on the product
- How do you perceive the effectiveness of green products compared to traditional products?
a. Green products are less effective b. Green products are equally effective c. Green products are more effective
- Are you aware of the environmental impact of the products you use?
a. No, I'm not aware of it b. Somewhat aware c. Yes, I'm very aware of it
- Have you made any changes in your lifestyle to reduce your impact on the environment?
a. No, I haven't made any changes b. Yes, I've made a few changes c. Yes, I've made significant changes
- Do you think it's important for companies to produce environmentally friendly products?

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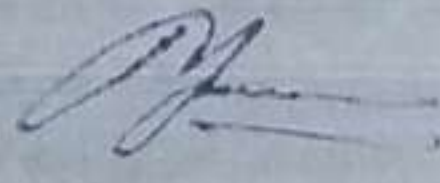


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REVIEW OF CENTRALLY SPONSORED SCHEMES FOR EMPLOYMENT

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Abstract: Every country makes plan of economic recovery through generation of employment, creating jobs which include short term as well as long term chances to have a quick impact on public in terms of livelihoods in public sector or the private sector. Work provides money for family which term in development of that family in the society. Development of the family or peoples directly and indirectly connected with development of the country. The government of India has launched various schemes for generation of employment for unemployed youth to bring them in the stream of economic development of the country. The paper tries to enlist the centrally sponsored schemes for employment for employment generation. The researcher papers throw brief outlines of schemes launched for employment generation.

Keyword-Employment, Schemes,

Introduction:

Any plan for economic recovery must include measures to stimulate the creation of new jobs. The word "job creation" can refer to a wide range of activities, including short-term chances that have a quick impact as well as the establishment of more long-term livelihoods in the public sector or the private sector. Consider the long-term viability and impact of any employment generation initiative while putting it in place. There are several reasons why having job available is so important. When young people have options other than violence, the public is more likely to be involved in the peace process as a result. When it comes to economics, work provides money to low-income households, boosts the economy's internal demand for goods and services, and increases overall economic growth. By enabling displaced persons to return home and enhancing social welfare in the long term, employability fosters social healing.

Objectives of the study:

1. To enlist the schemes launched by Government of India for employment
2. To reviews the schemes of Government of India for employment

Review of Centrally Sponsored Schemes for Employment

Increasing employment opportunities in rural and small towns, as well as enhancing employability, are two of the government's priorities. For example, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), the Deendayal Upadhey Yojana-National Rural Livelihood Mission (DAY-NRLM), the Deendayal Upadhyay- Gramin Kaushalya Yojana (DDU-GKY), and the Pradhan Mantri Gram Sadak Yojana are all Centrally Sponsored Schemes that are being implemented to address the issue of employment (PMGSY).

In addition, the Indian government has made initiatives to encourage the creation of new work opportunities. The Atmanirbhar Bharat strategy, which was introduced by the Indian government to



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promote the economy and ameliorate the effects of Covid 19, is intended to do both. The strategy's goal is to strengthen the economy while also mitigating the consequences of Covid 19 on the environment. The government is providing a fiscal stimulus to the economy in the amount of approximately Rs. 27,000 crores. This package covers long-term goals such as increasing the country's self-sufficiency while also providing jobs for the long run.

Garib Kalyan Rojgar Abhiyaan (GKRA) of 125 days:

It is the goal of this 125-day campaign, which will take place in 116 districts across six states (Bihar, Jharkhand, Madhya Pradesh, Odisha), to improve job and livelihood prospects for returnee migrant workers and other similarly afflicted populations, particularly youth in rural areas. The campaign will be carried out in collaboration with the Indian Council for Rural Development (ICRD). There was a total expenditure of Rs 39,293 crore on the Abhiyan, which resulted in the creation of 50.78 crore persondays of employment.

Aatmanirbhar Bharat Rojgar Yojana:

ABRY, which is a component of the Atmanirbhar Bharat Package 3.0, was launched on October 1, 2020, in order to encourage employers to create new jobs and to restore jobs that had been lost as a result of the Covid-19 pandemic. ABRY is intended to encourage employers to create new jobs and to restore jobs that had been lost due to the Covid-19 pandemic. The Employees' Provident Fund Organization (EPFO) is in charge of administering this scheme, which aims to lower employer expenses while simultaneously encouraging firms to hire more employees in order to keep up with demand. Changes are in force immediately, and the deadline for beneficiary registration has been pushed back to March 31st from June 30th. As of the 29th of January in the year 2022, the benefits obtained by 46.89 lakh beneficiaries from 1.26 lakh establishments amounted to Rs.3435 crore, representing a total of Rs.3435 crore

Aatmanirbhar Bharat Rojgar Yojana (ABRY)	
A scheme to incentivize employers for creation new employment	
Scheme	(ABRY)
Amount Reimbursed;	Rs.4378.44 Crore
Establishment benefited	01,38,323
No. of beneficiaries/ New employees	54,66,801

Source: <https://labour.gov.in/aatmanirbhar-bharat-rojgar-yojana-abry>

Prime Minister Street Vendor's AtmaNirbhar Nidhi:

It was announced on June 1, 2020, that the PM SVANidhi Scheme started with the purpose of enabling street vendors who had been affected by COVID-19 to re-start their operations. On November 30, 2021,

this programme has disbursed Rs 3,054 crore in loans to 30.2 lakh street vendors, a total of Rs 3,054 crore. It leveraged the network of lending Institutions like Scheduled Commercial Banks (SCBs), Non-Bank Finance Companies (NBFCs), Micro Finance Institutions (MFIs), Co-operative Banks, Small Finance Banks (SFBs), Regional Rural Banks (RRBs), etc. for the Scheme implementation.

Pradhan Mantri Mudra Yojana (PMMY):

People who want to work for themselves might benefit from the Pradhan Mantri Mudra Yojana (PMMY), a government initiative launched in 2010. PMMY provides collateral-free loans of up to Rs. 10 lakhs to qualifying candidates in order to support micro/small firms and individuals in beginning or developing their businesses. A total of 32.12 crores in loans were made under the scheme, which was in effect until the 21st of January, 2022. According to the government, the Production Linked Incentive Schemes might result in the creation of up to 60 lakh new employment over the next five years.

Under Pradhan Mantri Mudra Yojana (PMMY), institutional credit up to Rs. 10 lakh is provided by Member Lending Institutions (MLIs) to micro/small entrepreneurs, including Women, for income generating activities in sectors such as manufacturing, trading, services and activities allied to agriculture. This was stated by Union Minister of State for Finance Dr Bhagwat Kisanrao Karad in written reply to a question in Lok Sabha.

The Minister stated that as per data uploaded by MLIs on Mudra portal, as on 26.11.2021, the details of loans availed by Women entrepreneurs under the Scheme is as follows: -

	No. of A/Cs (in crore)	Sanctioned Amount (in Rs. Lakh crore)
All India	32.11	17.00
Out of which		
Women Entrepreneurs	21.73	7.42
% Share of Women Entrepreneurs	68%	44%

Source: <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1783537>

The Minister stated that the Government allocates annual targets for the amount to be sanctioned under PMMY to MLIs i.e., Scheduled Commercial Banks (SCBs), Regional Rural Banks (RRBs), Non-Banking Financial Companies (NBFCs) and Micro Finance Institutions (MFIs). For the current financial year (FY), a target of sanction of Rs. 3 lakh crores have been fixed for MLIs. State/UT-wise and Gender-wise targets are not allocated by Government under PMMY.

Government to improve implementation of the Scheme, which, inter alia, include:



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provision for online applications through psbloansin59minutes and udyammitra portal;
 some of the Public Sector Banks (PSBs) have put in place end-to-end digital lending for automated sanctions under PMMY;
 intensive publicity campaigns by PSBs and Mudra Ltd. for increased visibility of the Scheme amongst the stakeholders;
 simplification of application forms,
 nomination of Mudra Nodal Officers in Public Sector Banks (PSBs);
 periodic monitoring of performance of PSBs with regard to PMMY etc.

PM Gati Shakti:

In order to foster economic growth and long-term development, Prime Minister Gati Shakti is transforming the country. In addition to roads and trains, airports and ports, public transportation, rivers, and logistical infrastructure are included among the seven engines of the strategy. Clean Energy and Sabka Prayas have made it feasible for everyone to benefit from a wealth of career and business opportunities.

PMEGP:

The scheme is implemented by Khadi and Village Industries Commission (KVIC) functioning as the nodal agency at the national level. At the state level, the scheme is implemented through State KVIC Directorates, State Khadi and Village Industries Boards (KVIBs), District Industries Centres (DICs) and banks. In such cases KVIC routes government subsidy through designated banks for eventual disbursement to the beneficiaries / entrepreneurs directly into their bank accounts.

The maximum cost of the project/unit admissible in manufacturing sector is ₹ 25 lakhs and in the business/service sector, it is ₹ 10 lakhs. Categories of Beneficiary's Rate of subsidy under PMEGP (of project cost) Area (location of project/unit) General category 15%(Urban), 25%(Rural), Special 25%(Urban), 35%(Rural) (including SC/ ST/ OBC/ Minorities/Women, Ex-servicemen, Physically handicapped, NER, Hill and Border areas, etc.) The balance amount of the total project cost will be provided by the banks in the form of term loan and working capital.

Progress of PMEGP during XI(2008-09 to 2011-12) & XII Plan (2012-13 to 2015-16)

Year	MM subsidy released (Rs crore)	MM subsidy utilized# (Rs crore)	No. of projects assisted	Estimated employment generated
XI Plan Total (2008-09 to 2011-12)	3131.65	3067.69	1,64,283	16,05,865
2012-13	1228.44	1080.66	57,884	4,28,246
2013-14	988.36	1076.45	50,493	3,78,907



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2014-15	1073.17#	1122.54	48,168	3,57,502
2015-16	1013.53*	872.44*	38103*	278160*
XII Plan Total	4303.5	4152.09	194648	1442815
Grand Total (XI and XII Plan)	7435.15	7219.78	358931	3048680

Source:

At the national level, programmes such as the PMEGP of the Ministry of Micro, Small, and Medium-Sized Enterprises and the Deen Dayal Antodaya Yojana-National Urban Livelihoods Mission (DAY-NULM) of the Ministry of Housing and Urban Affairs, among others, are being carried out.

Ministry of Skill Development & Entrepreneurship (MSDE) has implemented the special programme for the fresh skilling (Short Term Training (STT) and upskilling (Recognition of Prior Learning (RPL) of the returnee migrant workers impacted by COVID-19 under its flagship scheme Pradhan Mantri Kaushal Vikas Yojana (PMKVY) to support the Garib Kalyan Rozgar Abhiyan (GKRA). This special programme has covered 116 districts of 6 state namely Assam, Bihar, Madhya Pradesh, Odisha, Rajasthan and Uttar Pradesh. MSDE with the support of District Administration has undertaken skill mapping of the returnee migrants and identified the beneficiaries for the training under PMKVY.

The following are some of the most major job-creating initiatives being pursued by the government: Make in India, Digital India, Smart City Mission, Atal Mission for Rejuvenation and Urban Transformation, Housing for All, Infrastructure Development, and Industrial Corridors, to name a few.

Conclusion.

Government of India has taken various initiative for the generation of employment. The government trying to increase the employment opportunities as well as enhancing employability in rural as well as urban sectors. Crores of money is being allocated for upliftment of youth through this scheme. The schemes are practical approach and generating employment to foster economic development and long-term growth and new work opportunities

Reference:

1. <https://www.india.gov.in/spotlight/pm-gati-shakti-national-master-plan-multi-modal-connectivity>
2. <https://www.ncs.gov.in/>
3. <https://labour.gov.in/national-career-service>
4. <https://msme.gov.in/schemes/pm-employment-generation-program-and-other-credit-support-schemes>



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THE IMPACT OF COVID-19 ON BANKING SECTOR: AN INDIAN VIEWPOINT

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Abstract—The banking and financial industry, whose prospects are related closely to those of the economy, is sure to face the brunt of the anticipated slowdown in economic development. The International Monetary Fund has reduced India's GDP growth prediction to 1.9 percent for 2020-21. There is a possibility of an increase in defaulted loans. "The downturn might potentially lead to job losses, which could put on the retail lending books of financial institutions. The loss of revenue from tourism and the entertainment industries, amongst many other areas of business, has already damaged the economy. These and other such factors are all building up to put a burden on the economy of the whole world, which may potentially have ramifications for the next year. The governments, central banks, and regulatory bodies in the Asia-Pacific region have each implemented their own unique set of countermeasures in response to COVID-19. These include the infusion of additional cash, loans directed at damaged companies and areas, and reductions in the policy interest rate. Additionally, it involves assistance for financial institutions in their provision of forbearance to economically viable people and companies that were negatively impacted by COVID-19.

Keywords—Artificial Intelligence, Technology, Machine Learning, Banking Sector

INTRODUCTION

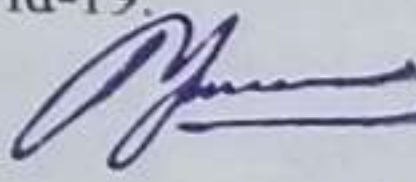
The recent precipitous fall in the price of bank equities is a reflection of investors' diminishing trust in trust in the international monetary system. The economic slump caused by the COVID-19 crisis, according to the survey findings, would cause local banks to face a rise in their non-performing total asset ratio of 1.9% and their credit cost ratio of 130 basis points by the year 2020. The assumption behind these projections is that the economy will continue to strengthen in the aftermath of the COVID-19 disaster. According to the article "For Asia-Pacific Bankers, COVID-19 Problem Could Add USD 300 Billion To Credit Expenses," this sum of money will be required to meet the costs connected with the crisis inside the region's financial institutions. S&P Global Ratings predicts that by 2020, the proportion of non-performing assets (NPA) in China's banking system would have increased by around 2%. This outlook is based on the assumption that the Chinese economy would continue to contract. The research indicated that the economic volatility brought on by COVID-19 would test the rating resilience of the region's twenty various banking sectors. The success of government and regulatory efforts to ensure that financial institutions' assets remain in good shape beyond 2020 will rely in part on these efforts. One of credit's many functions is to even out fluctuations in consumer spending by acting as a kind of temporary insurance against life's unexpected bumps, such as the recent pandemic and its consequent lockdown. (Panchal, 2021)

OBJECTIVE

The research paper aimed to fulfill the following objectives:

- To study the state of affairs of the Indian banking sector during covid-19.
- The Study the impact of Covid-19 on Banking Sector in India.
- To study the reforms in RBI Policies due to Covid-19




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METHODOLOGY

As a direct consequence of this, a market for financial solutions that contribute to the attenuation of the consequences of any potential future crises will develop. It's possible that the producers of these things are capitalizing on the desire of homeowners and companies alike to take safety measures and steer clear of needless dangers. Because the Coronavirus may be carried on the surface of banknotes and coins, one might argue that the virus "dirties" money. This is due to the fact that the virus can be carried on the surface of these items. Therefore, the fear of infection will be the driving force behind the second wave of digitalization, as well as the flight away from cash.

This would provide even more assistance to India's already amazing pace of digitalization, which has been picking up steam over the course of the last several years. Despite this, it is anticipated that there will be a decrease in both the value of transactions and the number of transactions as a consequence of the possibility of a prolonged slowdown in the economy in the medium future. The activity level of transactions is expected to steadily decline, which will operate as a barrier to the expansion of the market share of digital transactions. It is probable that the pandemic will have an impact not only on the method of choice for the delivery of financial commodities but also on the sort of products that are provided and their structure. In India's economy, the expansion of the financial industry will continue regardless of whether or not COVID-19 is put into effect.

COVID-19 ON BANKING SECTOR

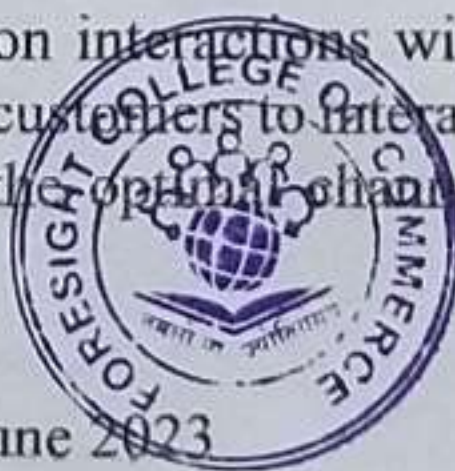
Standard teller services and banking activities, including depositing and withdrawing money and clearing checks, required customers to keep at least one meter of distance. A bank employee's effort to clean dirty checks with a steam iron has gone viral after he or she was caught on camera using tongs.

A weakness in our banking systems and a general lack of adaptation in the industry were exposed in the face of an emergency by the operational and technical challenges faced by both customers and employees. The bank's continuing attempts to digitize and improve its backend procedures will get an injection of much-needed discipline as a result of the immediate lessons learnt from the ongoing COVID-19 challenge. Banking institutions will no longer have to rely on paper, manual reviews conducted by humans, or employee participation in the process. According to a study (Jaiswal, 2020),

Because to COVID-19, not only will new technology be adopted more quickly, but four fundamental areas of banking will also get renewed emphasis:

- ◆ Taking Advantage of New Technologies – Emerging technologies will play a pivotal role in the aftermath of the epidemic and the economic uncertainty, playing a significant role in both the acceleration of transactions and the reduction of costs for banks. The banking industry in India has previously acknowledged the importance of technology in expanding its customer base and business operations.
- ◆ The removal of vertically integrated stacks, APIs, containerization, cloud computing, artificial intelligence, and blockchains is anticipated to result in increased rates of use of micro service architecture.
- ◆ The digital transformation of banks and other financial institutions, as well as the reimagining of digital service delivery, will be significantly aided by the use of these technologies.

The 2017 World Bank Global Findex Report found that among the world's 190 million individuals who do not possess access to a bank account, a large percentage live in India. Channels of Digitization - As mobile phone and internet usage continues to rise, the primary focus will be on boosting the uptake of technology that allows digital financial inclusion. Another area of focus would be the continuing shift in customer behaviour away from in-person interactions with bank branches and toward those conducted through digital means. Banks will allow customers to interact with the institution via a wide range of digital and automated channels, allowing for the optimal channel mix. Banks in India will take into account



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important factors including demographics, internet availability, last-mile connectivity, and consumer banking activity patterns to facilitate effective adoption. (SALEEM et al., 2022)

Security, Privacy, and the Trust of the Customers - There was an upsurge in cyber fraud in India's banking sector during the fiscal year 2017-2018, with losses estimated at \$13.7 million, as reported by the Reserve Bank of India (RBI). As the use of cashless transactions in digital economies grows, banks will need to develop secure frameworks and systems. Financial fraud, money laundering, data loss, identity theft, and privacy breaches are just a few of the threats that may occur on the internet. After uncovering external and internal system flaws, the bank should take severe actions. Firewalls, smart networks, financial-grade application programming interfaces (APIs), and secure communication with customers need strong customer authentication (SCA). Robust financial solutions, including cyber security measures, are crucial for protecting against hostile assaults. (Kaicker et al., 2022)

Policy and Compliance - With the goal of developing business for the unbanked and under-banked people in our nation, we must prioritize expanding access to digital payment methods, especially in rural India. There are two types of persons in this category: those without bank accounts and those with insufficient funds in their existing accounts.

When it comes to safety and privacy, India is already well on its way to introducing the Personal Data Protection law (PDP), which will be modeled after the GDPR that will be implemented in the EU. The implementation of an open banking rule in India, similar to those that have been implemented in the UK and the EU, has the potential to further accelerate the ongoing financial revolution in India.

• **OTHER REPERCUSSIONS**

There is a high probability that COVID-19 will cause a significant change in consumers' prophylactic savings and their avoidance of risk. This rise may cause an increase in the proportion of people who put their savings into bank deposits, which are often seen as the safest kind of savings vehicle. On the other side, the tendency of families to borrow money in order to spend it will decrease. Bank tellers may amass large accounts but face a dearth of loan applicants. Banks, despite an increase in loan demand, will remain risk-averse. As a result, financial institutions are likely to place more emphasis on the need for safe as liquid collateral when extending credit. This might lead to a reduction in the availability of unsecured forms of credit such as personal loans and mortgages. Borrowers of all stripes, from consumers to corporations, can benefit from better lending if better techniques for measuring risk are developed, and deeper studies of borrower risks are conducted. Because of this, there is a pressing need for a significant improvement in the analytical techniques and data that are used to construct more "full" risk profiles of borrowers. The banking and financial industry is among the industries that have been struck particularly hard by the recent economic crisis. While the Nifty50 index has dropped by 27.7 percent during the previous three months, the Nifty Bank index has plunged by 40.1 percent. There is a possibility that individuals would buy more insurance as a result of the epidemic, which is something that should be taken into consideration by insurance companies. An investor must have a time horizon of at least seven years in order to purchase shares in a fund that invests in the banking and financial industry and has a continuous track record. Steer clear of people who have a connection to the more susceptible market groups described before. The proportion of an equity portfolio that is put into a sector fund should not be more than five percent. (Mathew et al., 2022)



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Figure 1: Impact Of Covid On the Banking Sector

Reforms to the RBI in India

Regulatory Document for COVID-19 In response to the COVID-19 Pandemic Disruptions, the RBI released a circular outlining a number of regulatory measures, including the establishment of provisions and Asset Classification Norms. You may find these steps in the preceding phrase. The RBI has made it clear that it intends to make it easier for businesses to make their loan payments, as well as easier for them to manage their working capital, and that it intends to do all this in an effort to reduce the financial strain on company owners. (Kanojia, 2020)

➤ *Adjustments to Payment Schedules for Term Loans and Working Capital Facilities*

Due on April 1, 2019, commercial banks in India (including regional rural banks, small finance banks, and local area banks) and then all cooperative banks and non-banking financial companies in India must pay the Equated Monthly Installment (EMI) on all outstanding agricultural term loans, retail loans, but instead crop loans in an effort to lessen the impact of the COVID-19 pandemic. As a means of maintaining the repayment schedule, the loan amount term will be transferred to the board. Interest on the term loan will accrue at the regular rate throughout the moratorium period. The Reserve Bank of India has decided to provide working capital services including cash credits and overdrafts. Commercial banks will have less payment obligations starting June 1, 2020, and going through August 31, 2020, per a decision reached earlier. To recoup interest, which applied to all of those establishments. Financial institutions may, at their option, convert the postponed interest accumulated until August 31, 2020 into a funded interest term loan (FITL) with a repayment deadline of no later than March 31, 2021. We expect full repayment of this loan. As a result of the severe economic downturn and business closures, the banking industry is now under significant stress. As a result, the banking industry and the law have undergone significant changes. (Gul & Kaytaz, 2021)

➤ *Provisions in Making Working Capital Financing*



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Borrowers in India have the option of using either Cash Credit or to repay their working capital loan from the Reserve Bank of India. This helps ease the burden on banking institutions so that they may continue to serve their customers. The RBI has decided to do this as a preventative precaution in the face of the COVID-19 Pandemic. It's 2020, as announced by RBI. The Reserve Bank of India established this arrangement as a short-term measure, and it will expire on March 31, 2021. Until March 31st, 2021, the Reserve Bank of India will continue to conduct these evaluations in order to authorize working capital constraints; these evaluations will be based on an examination of the working capital. In order for the financial institution to engage in the aforementioned tasks, it will need to be convinced that doing so is important due to the monetary damage brought on by the COVID-19 epidemic. Further, given the impact that the COVID-19 outbreak has had upon the financial sector, accounts that are granted extra flexibility in accordance with these instructions will indeed be subject to a further supervisory review to confirm their justifiability. The Reserve Bank of India's board of directors sets the rules for the country's banking system, and financial firms in India must follow these rules at all times. (Bhattacharyya et al., 2022)

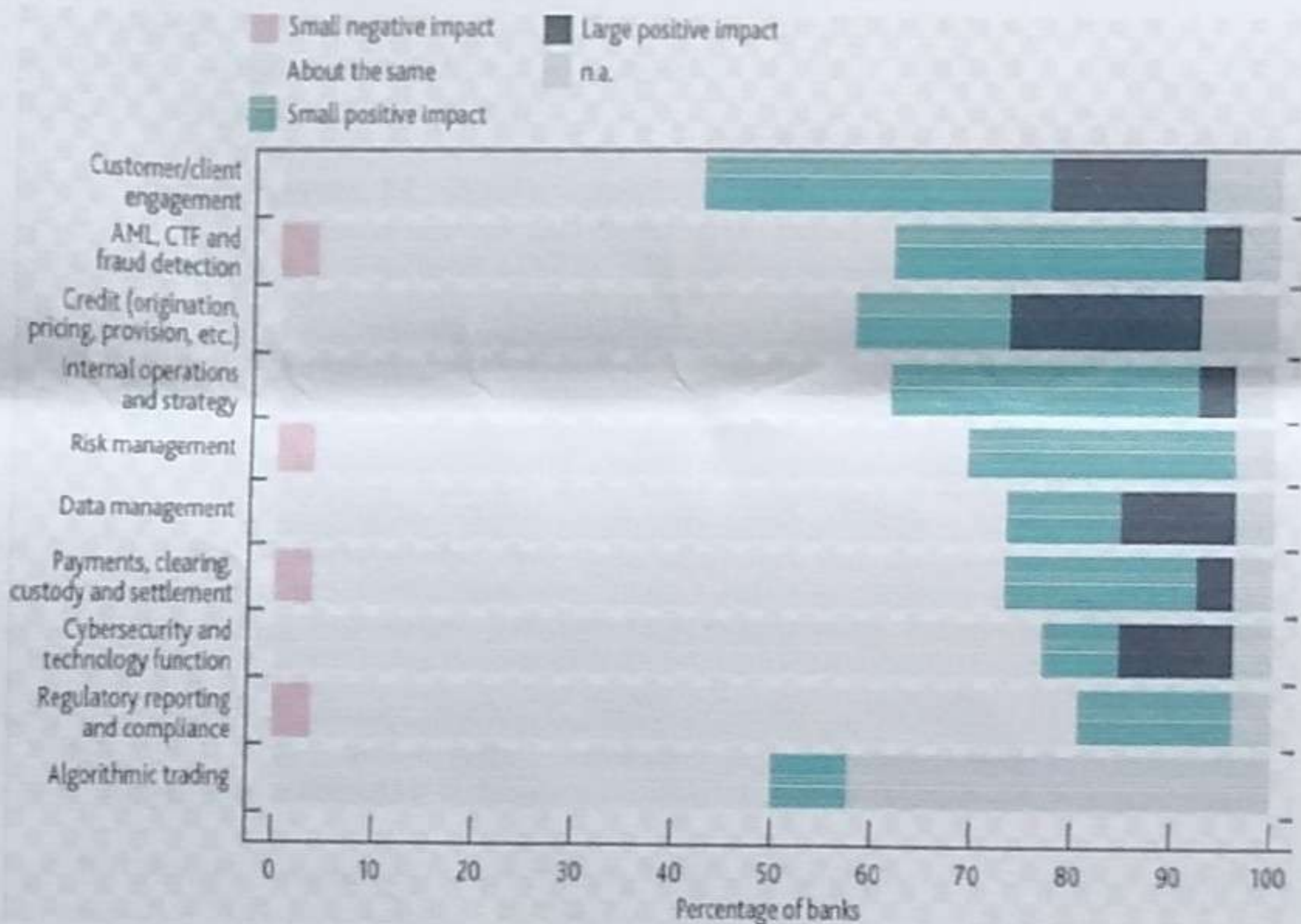


Figure 2: Impact of covid on banking

CONCLUSION

This has two ramifications for the future of banking. Initially, the banking sector will function in a monetary environment characterized by abundant liquidity and very low interest rates. As a second point, the government will play a major role in the banking sector as both a borrower (to finance its deficit) and then a "risk absorber," providing guarantees, back-stops, and more direct fiscal support to borrowers whose businesses and cash flows are impacted by the virus. In its role as a borrower, the government will use the money it receives toward reducing its deficit. A related question is what the future of banks' loan books will look like, given big economic upheavals often lead to an increased risk perception and a simple





flight to quality. This implies that banks will be more likely to lend to borrowers their income or cash flow are stable and predictable, and less likely to lend to those whose financial stability is at risk from fluctuations in their income or cash flow. Instead, financial institutions will prioritize extending credit to borrowers who can provide evidence of stable cash flow. Generally speaking, banks tend to follow the adage that "big does matter". The flight to quality might end up becoming a race to the size of the company since, on average, larger businesses have a lower risk of going bankrupt than their smaller counterparts. The majority of businesses in consumer-oriented industries are now working at less than 70 percent of their capacity, which is the general agreement among industry executives. Banks continue to have a very low tolerance for risk, and this is also the case. The speed with which the economy makes a recovery will determine the state of the banking industry. Now, everyone's attention is focused on the anticipated economic stimulus package from the government.

REFERENCES:

- [1] Bhattacharyya, H., Agarwalla, R., & Khandelwal, A. (2022). Impact of covid-19 on child health and healthcare services. *Medical Journal Armed Forces India*, 78(1), 3–6. <https://doi.org/10.1016/j.mjafi.2021.10.006>
- [2] Gul, M. C., & Kaytaz, M. (2021). Impact of covid-19 on people-processing vs. information-processing services: Case of Food Service and banking industries. *The ICT and Evolution of Work*, 87–102. https://doi.org/10.1007/978-981-33-4134-0_5
- [3] Jaiswal, S. (2020). Impact of covid-19 on the banking sector in India. *RESEARCH REVIEW International Journal of Multidisciplinary*, 5(9), 270–273. <https://doi.org/10.31305/riijm.2020.v05.i09.067>
- [4] Kaicker, N., Aggarwal, R., & Gaiha, R. (2022). Covid-19 pandemic: Impact of lockdown on firm-level returns in India. *Transformations in Banking, Finance, and Regulation*, 583–613. https://doi.org/10.1142/9781800610781_0020
- [5] Kanojia, A. (2020). Impact of covid-19 on Mental Health in India. <https://doi.org/10.31234/osf.io/fkjsx>
- [6] Mathew, S. M., Sunil, S., & Saleem, S. (2022). A study on the impact of the COVID-19 pandemic on the adoption of tech-driven banking in India. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4022859>
- [7] Panchal, N. (2021). Impact of covid-19 on banking in India: An empirical analysis. *Towards Excellence*, 446–459. <https://doi.org/10.37867/te130235>
- [8] SALEEM, D. S. H. A. N. I. M. O. N., MATHEW, S. E. E. N. A., & S, S. U. N. I. L. (2022). A study on the impact of the covid-19 pandemic on the adoption of tech-driven banking in India. <https://doi.org/10.31124/advance.19105505.v1>



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AN AWARENESS OF HTML5 AND HTML 6 IN WEB DEVELOPMENT

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ABSTRACT

The future languages for web development are and will be HTML5 and HTML6. For everyone who uses the internet, there is a new standard called HTML5 and HTML6. In this paper describe details on HTML5 and HTML6. We also talk about HTML6 for web development. This paper also explains how the user can access anything, including animation, images, music, and videos, and that HTML5's improved capabilities may be used to build sophisticated web applications. The research paper explained the introduction of HTML5 and HTML6, as well as the best ways to use HTML5 and HTML6. The advantages of HTML6 over HTML5 are also covered by the researcher.

Keywords: HTML6, HTML5, web technology, HTML5 features, HTML6 features

OBJECTIVES OF THE STUDY

- To understand the concept of HTML and its versions.
- To study HTML5 and HTML6.
- To be aware of HTML5 and HTML6
- To study the features of HTML5 and HTML6.
- To study the compare of HTML5 and HTML6

RESEARCH METHODOLOGY

This research is based on both primary and secondary data, making it highly informative.

Primary Data - For this research, we conducted an online survey and a questionnaire (Google form) was utilized to gather primary data from 24 participants who ranged from 15 to 30+ in age.

Secondary Data - The sources of secondary data of this research are Internet, journals, various other websites, e-books.

Sample size: —24 respondents

Sampling technique: Simple random sampling

Sampling instrument: Questionnaire

LIMITATIONS OF STUDY

- This analysis is limited to Primary data and Secondary data.
- Time limitation while collecting the Primary data.
- Generalization of all the data from this analysis is not possible
- Analysis is restricted by the data's visibility.

HYPOTHESIS

H0:- There is significant awareness of HTML5 and HTML6 among the web designer and Web Developer.

H1:-There is no significant awareness of HTML5 and HTML6 among the web designer and Web Developer.



INTRODUCTION HTML5

It is HTML's fifth version, an improvement above HTML4. Declaring a doctype `<!DOCTYPE html>` Comes with new HTML5 tags, including `<header>`, `<footer>`, `<canvas>`, `<audio>`, `<video>`, `<article>`, and many more. It can handle incorrect syntax issues. The offline data that is accessible through HTML5's JavaScript interface is stored using the web SQL database, web storage, and application cache. `div>` tag is not necessary.

UTILITY OF HTML5

For those that wish to take use of more properties and features, utilizing HTML5 is recommended. Continue reading the list below for an explanation of some of the benefits of using HTML5:

- **Simple and clear syntax** – Syntax that is easy to learn and reuse. HTML5 has a simple, straightforward structure. The opening DOCTYPE element, which was extensive in HTML4 and significantly shorter in HTML5, is a wonderful example.
- **Introducing the multimedia elements** - Using multimedia resources in HTML5 is very simple because it has fixed elements and tags. Previously, you had to upload an audio or video file via third-party plugins.
- **Enhanced access to the user's location** - Now that HTML5 makes use of JS Location tracking, authors can rapidly determine the user's geographical location.
- **Communication with the client-server** - HTML5 now makes use of web sockets, which greatly simplifies the process.
- **JavaScript executes in a different thread**-JavaScript and the browser can run on separate threads due to HTML5, which employs the most recent version of the JS Web Worker API.

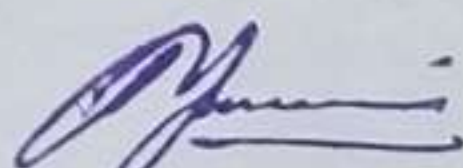
INTRODUCTION HTML6

The sixth version of HTML, which will definitely leave its impact on the market, is ready to attract web developers because it is a simple web development language. This time, HTML6 has been released, which is a collection of namespaces created using XML and traditional HTML. When compared to other more established versions, the current HTML6 adaptation is seen as one of the most popular and widespread changes. Learning HTML6 is important if you desire to become a professional website specialist. HTML6 is an upcoming version of HTML that is currently under development. It is expected to be released in 2021, and will be the sixth major version of HTML. It is expected to include new features such as improved support for 3D graphics, more efficient use of bandwidth, and improved accessibility.

SIGNIFICANT USES OF HTML6?

- **Imagery scaling for browsers:** A photo's pixel size can vary from desktop, laptop, and mobile devices. For a specific image, an improved HTML6 method may suggest a desired height or width, and the server could offer the best resolution.
- **Pluggable Languages**-HTML6 will introduce more powerful, pluggable languages that will give web developers more flexibility and design options. When a solid open source implementation is made, this might be adopted by all browsers.
- **Additional Power Over the Video Object:**-More control over the distribution of video structures on web pages may be possible with HTML6. This version has a rectangle and several video frameworks, and gives the developer additional freedom over a text channel with annotations, subtitles, etc
- **Camera Inclusion:**-The web camera on mobile devices is learning a great approach to submit a photo or video capture to forms with the aid of HTML6. The tool might provide more control over the camera and capture rate.




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→ **Secure Authentication:**-With HTML6 available, Given how difficult it is to design reliable hardware, the browser may offer a lot in the way of a rapid and hardened authentication method. The browser could suggest signing tokens in addition to entrenched keys as an alternative to cookies.

THE BENEFITS OF HTML6 OVER HTML5 ARE DETAILED IN THE FOLLOWING LIST:

- 1. Along with the camera:**-This function is not enabled by HTML5. HTML6 allows the addition of video and images taken with cameras into the forms since people are increasingly using apps on mobile phones and with devices that have a microphone and a camera attached. Additionally, the form has access to any device's saved photographs and has camera control for the most effective live capturing. Websites can thus continue to compete with apps that incorporate mobile camera images automatically.
- 2. Video Object Control:**-The HTML5-embedded video objects have access to a variety of compression algorithms, but there is no control over how the video frames themselves are shown on a page. At the moment, a rectangle is just filled with video frames, and we have only text, with annotations and subtitles, that we can control. The use of callback hooks and synchronization, such as blending video with DOM objects, are advantages of HTML6
- 3. Guaranteed Library :-**Although jQuery and JavaScript are already part of HTML5, each website must load a distinct version of the libraries. This wastes both performance and energy. Some bandwidth is saved because to the shared libraries from Google and Yahoo. HTML6 can help with this by allowing standard libraries to be published alongside browsers. This can necessitate that a team of programmers use a reputable generic library. Additionally, this would hasten the jQuery version caching process.
- 4. Image Sizing Flexibility:** -Images for mobile devices must have a different resolution than those for laptops, however HTML5 only supports images using the `img>` element from a single standard SRC. Since the amount of pixels is fixed, the browser must first degrade a picture with too many pixels before displaying it. Performance is negatively impacted, and machine effort is wasted. In order to ensure that only the highest resolution picture is downloaded, HTML6 can enable the specification of the required height and width of the image.
- 5. Pluggable Languages and Pre-Processors:**-JavaScript is still an accepted language for HTML up to version 5, although it's odd that you have to mention it even if no other language is. This may be done for future compatibility, which will enable developers the freedom to switch to open-source solutions that all browsers can use. By permitting pluggable languages that are more powerful and familiar to the developer, HTML6 may very well be able to offer this feature. The language might be preprocessed into JavaScript by the browser, taking use of the capabilities of the particular computer to provide the best possible code.
- 6. Organized Annotation:** HTML6 allows for better organization by allowing annotations to paragraphs, phrases, words, photographs, and even videos, whereas HTML5 only supports comments at the bottom of publications.
- 7. Auto Availability to Contact Information:** HTML6 might replace HTML5's copy/paste functionality with automated access to contact information stored, for example, in a mobile phone. Only reputable and trusted domains should be allowed automatic access to contact information.



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8. HTML5 and HTML6 have a major difference: HTML5 is the current version of HTML, and is supported by all modern web browsers. HTML6, on the other hand, is still under development and although there is no official timeline for its release, HTML6 will include new features such as improved support for 3D graphics, more efficient use of bandwidth, and improved accessibility.

NEW TAGS AND FEATURES IN HTML6-

Namespaces and an XML-like structure are features of HTML's sixth version, or HTML6, sometimes known as HTML6. A tag may be used several times without interfering with any other tags thanks to XML namespaces.

For instance, `xmlns:xhtml="http://www.w3.org/1999/xhtml"` is used as an example in the XHTML DOCTYPE. The W3C decided to reserve namespaces rather than tags, therefore HTML6 takes advantage of this clever idea by allowing us to use whatever tag we choose. The W3C would essentially reserve every namespace and offer a unique HTML API for each namespace it reserved.

1.<html:html>

A HTML document is now starting. similar to the existing <html> tag.

2.<html:head>

This is the head tag for HTML. the same as the present <head> tag. We have all of the JavaScript, CSS, RSS feeds, etc. inside of this element.

3.<html:title>

The HTML file's title is as stated below. similar to the <title> tag as it is currently used.

4.<html:meta>

The current HTML version is a little different from this. In HTML6, meta data can be anything. There are no needed or unconventional meta kinds, unlike HTML today. As a developer, you may use it to store content, and other websites can use it to get data like page descriptions.

5.<html:body>

This is a HTML's body tag. Equivalent to the current <body> tag. This is where you'd place most of the stuff that would be visible to the users like text, media, and so on.

6.<html:link>

This links external documents and scripts such as CSS, JavaScript, RSS, favicons, etc. to the current document. Equivalent to the current <link> tag.

7.<html:a>

This tag designates either a page anchor. similar to the existing <a> tag.

The <a> tag can take on the following attributes:-A link to the target (can be blank, parent, top or self)

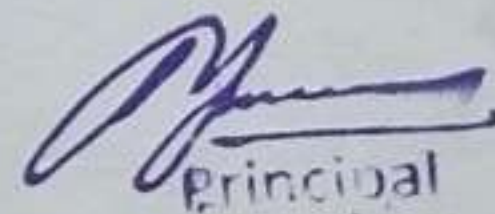
8.<html:button>

similar to HTML's earlier versions of <button> or input type=button.

The <html:button> element can have the following attributes: disabled.

9.<html:media> This tag encompasses the many media tags that are currently available, including , <video>, <audio>, <embed>, and others. The browser won't need a tag for each type of file; instead, it will know how to run it based on the type attribute, the file extension, and finally the MIME type.




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10. `<form:form>` A new form is created by this tag. Method and action are attributes. The POST or GET method attributes are available. Where to transmit the data is specified in the action property of the form.

11. `<form:input>` The new form input is created by this tag. similar to the existing `<input>` tag. The entire range of input types includes: text, email, url, number, datetime, date, month, week, and time.

12. `<form:select>` Users can choose alternatives from this tag rather than entering anything. similar to the existing `<input>` tag.

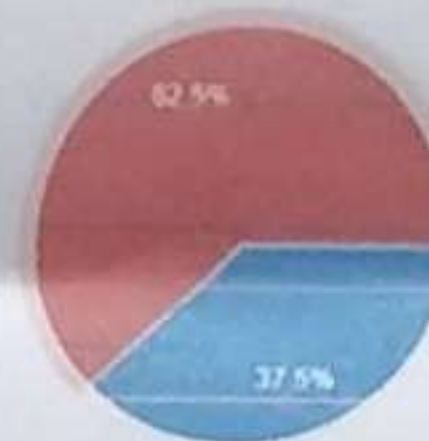
13. `<form:submit>` This tag allows you to submit a form. like the current `<input type=submit>` tag. The `<form:submit>` tag must have the following characteristics: name and value.

DATA ANALYSIS AND FINDINGS

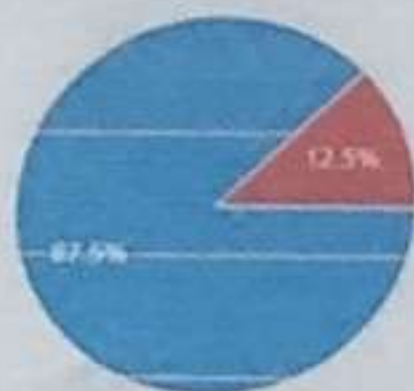
Are you aware of HTML5?
24 responses



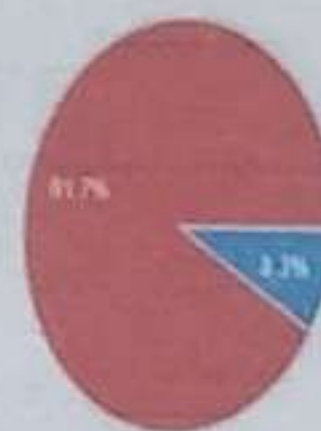
Are you aware of HTML6?
24 responses



Are you using HTML5?
24 responses



Are you using HTML6?
24 responses



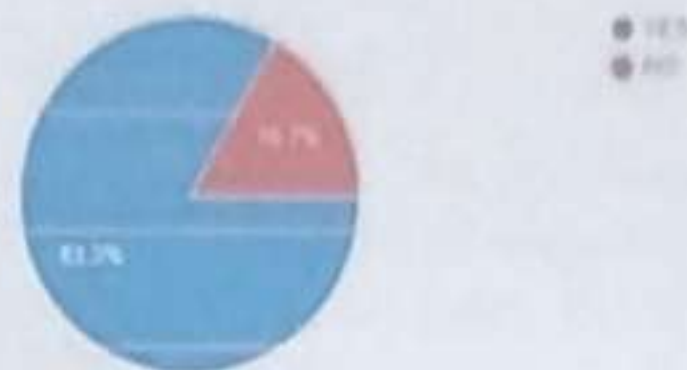
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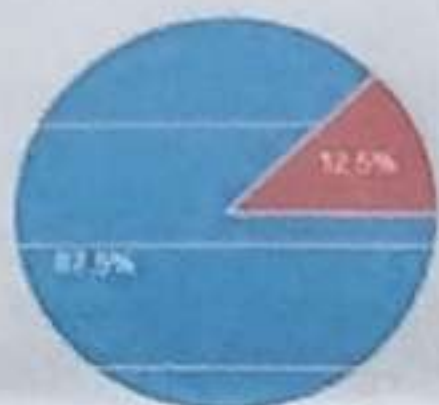
Do you know HTML and their versions?
 24 responses



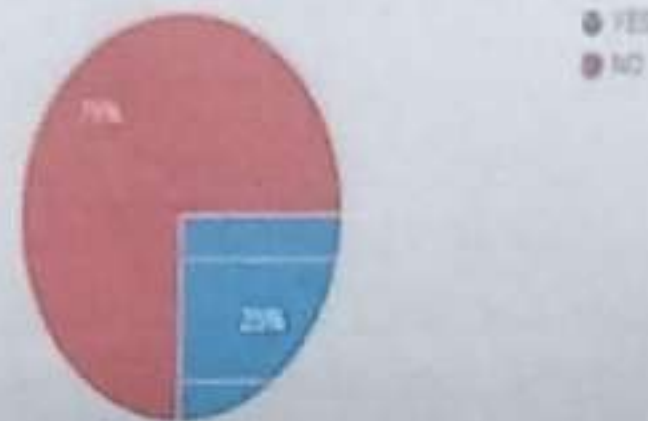
Can you easily use HTML5 for websites?
 24 responses



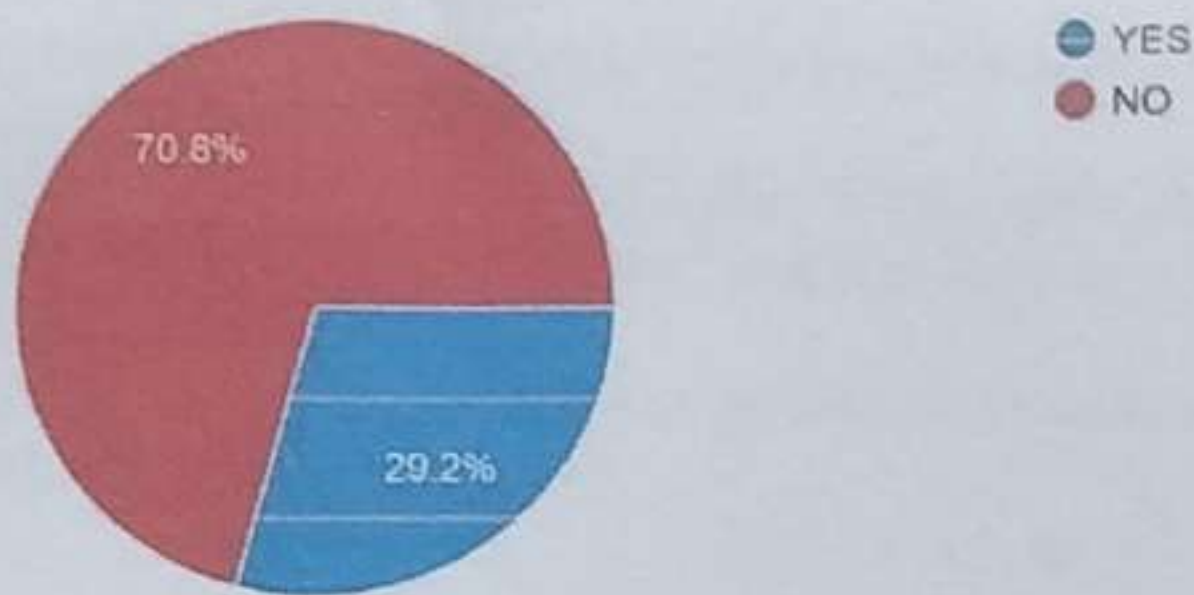
Do you know structure of HTML5?
 24 responses



Do you know structure of HTML6?
 24 responses



Are you comfortable with XML-type namespaces for html6?
 24 responses



According to the study the following fact are found

1. It is observed that 95.8% of respondents are aware of HTML5, while only 37.5% are aware of HTML6.
2. It has been observed that 87.5% of respondents are currently using HTML5, while 91.7% of respondents are not using HTML6.
3. It is observed that 83.3% of respondents know HTML and their versions.
4. It is observed that 83.3% of respondents easily use HTML5 rather than HTML6 for websites.



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5. It is observed that 87.5% of respondents know the structure and syntax of HTML5 and only 75% of respondents don't know the structure and syntax of HTML6.
6. It is observed that 70.8% of respondents do not use HTML6 because they don't know XML-type namespaces.
7. It is found that respondents have a knowledge about HTML5 than HTML6 .

SUGGESTIONS

1. More and more people are using apps on mobile phones and various devices that have a microphone and a camera attached, HTML6 enables the insertion of video and photographs or images recorded with cameras into the forms. So, the HTML6 must be used for more pertinent purposes.
2. HTML6 will come with additional capabilities including enhanced 2D and 3D graphics capabilities, more efficient bandwidth usage and increased accessibility, which will gain importance in the future.
3. For developers, HTML6 is an exciting opportunity to create more powerful and engaging websites and applications.

CONCLUSION

This paper has exclusively covered the benefits of HTML5 and HTML6. HTML 6 is currently being discussed by the World Wide Web Consortium (W3C) as part of the HTML5.2 standard. However, many features of HTML6 are already supported by modern web browsers. HTML 6 is expected to introduce new features and capabilities to HTML, but the exact details of what more will be included in HTML 6 remain to be seen.

REFERENCES

1. <https://ijcsit.com/docs/Volume%205/vol5issue02/ijcsit20140502328.pdf>
2. <https://www.irjet.net/archives/V5/i3/IRJET-V5I3123.pdf>
3. https://www.brainwareuniversity.ac.in/brainwave/archive/pdf/Vol-2-Issue-1-May-2021/21_1510400714_Final_153-158.pdf
4. <https://www.naukri.com/learning/articles/top-features-of-html5-with-examples/>
5. <https://w3lessons.info/introduction-to-html6#:~:text=HTML6%20is%20considered%20as%20a,logo%20on%20the%20web%20page.>
6. <https://www.positronx.io/html6-is-coming-here-is-a-sneak-peek/>
7. <https://wpflask.com/all-about-html6/>
8. <https://www.htmlgoodies.com/guides/expected-new-features-in-html6/>
9. <https://w3lessons.info/introduction-to-html6>



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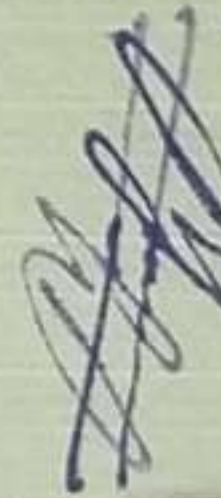
AN AWARENESS OF HTML5 AND HTML 6 IN WEB DEVELOPMENT

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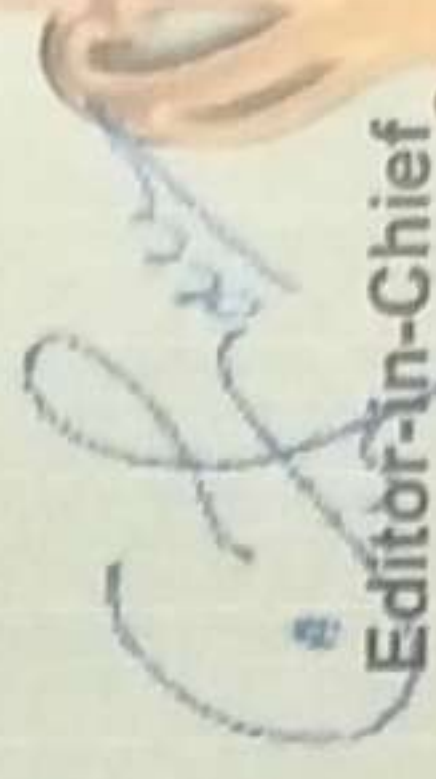

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