Role Of Big Data Analytics in Developing Customer – Centric Marketing Strategies in Screencart Marketing Ltd in Coimbatore City

Dr. M.R. Chandrasekar[1], Mr. Naren S[2]

[1] *Associate Professor, Dr. N.G.P. Arts and Science College, Coimbatore, Tamilnadu, India*
[2] *Student of III B.Com., Department of Commerce, Dr. N.G.P. Arts and Science College, Coimbatore, Tamilnadu, India*

Abstract—In today's digital-driven market, customer expectations are rapidly evolving, demanding personalized and data-informed marketing strategies. This study explores the significant role of Big Data Analytics (BDA) in enabling ScreenCart Marketing Ltd, a mid-sized firm in Coimbatore, to craft customer-centric marketing strategies. Coimbatore, known for its dynamic industrial growth, presents both challenges and opportunities for marketers. By leveraging BDA, ScreenCart can interpret vast amounts of customer data to uncover patterns, preferences, and behavioural insights that drive more targeted, relevant, and effective marketing campaigns. This research investigates how BDA contributes to improved customer engagement, campaign optimization, and strategic decision-making. Using a combination of primary data collection and analytical tools, the study identifies key benefits, challenges, and practical applications of integrating Big Data into marketing operations. The findings reveal that BDA not only enhances customer satisfaction but also positions the company for competitive advantage in a fast-changing business environment.

Index Terms—Big Data Analytics, Customer-Centric Marketing, ScreenCart, Coimbatore, Data-Driven Strategy.

I. INTRODUCTION

In today's data-driven era, businesses are constantly evolving to meet the rising expectations of increasingly informed and empowered customers. Traditional marketing strategies that relied on intuition and broad generalizations are no longer sufficient in addressing the unique needs of individual consumers. Instead, companies are now turning toward data-backed insights to create more precise, personalized, and effective marketing efforts. This shift has been largely fueled by the emergence and integration of Big Data Analytics (BDA) is a revolutionary tool that enables organizations to analyse massive volumes of structured and unstructured data to gain actionable insights.

Big Data Analytics has become an essential asset in modern marketing, particularly for firms aiming to adopt a customer-centric approach. By analysing patterns in consumer behaviour, preferences, buying habits, and feedback, companies can tailor their marketing strategies to better align with customer expectations. This not only enhances customer satisfaction but also improves brand loyalty, retention, and overall business performance. ScreenCart Marketing Ltd, a dynamic and growing marketing company based in Coimbatore City, presents a compelling case for the application of Big Data Analytics. Operating in a highly competitive landscape, ScreenCart must continuously innovate its strategies to maintain relevance and appeal to its target audience. Coimbatore, known as the "Manchester of South India," is a thriving industrial and commercial hub that provides a fertile market for diverse marketing efforts. The city's evolving consumer behaviour, rising digital adoption, and growing entrepreneurial ecosystem make it an ideal setting to explore the impact of Big Data in marketing.

The integration of BDA into Screen Cart's marketing framework offers the potential to transition from generic marketing approaches to more individualized, data-driven strategies. With insights drawn from customer data, the company can identify market trends, predict customer needs, segment audiences more accurately, and deliver personalized experiences that resonate. This customer-centric model not only

strengthens Screen Cart's market position but also enables long-term business sustainability. This research aims to examine the role of Big Data Analytics in formulating customer-centric marketing strategies at ScreenCart Marketing Ltd. It investigates how BDA tools and techniques can be applied to improve marketing efficiency, enhance customer engagement, and drive business growth in the context of Coimbatore's distinct market environment. Furthermore, the study explores the opportunities and challenges faced by mid-sized companies like ScreenCart in adopting BDA, providing practical insights and a strategic roadmap for leveraging big data in marketing.

OBJECTIVES OF THE STUDY

- To analyse the contribution of Big Data Analytics towards learning about the behaviour, taste, and tendencies of customers.
- To find out how Big Data can make personalized and focused marketing campaigns possible.
- To explore the application of predictive analytics for predicting customer behaviour and curbing churn.
- To outline ways for amalgamating cross-channel data in order to provide a seamless customer experience.
- To provide recommendations for maximizing marketing ROI through data-driven decision-making.

II. REVIEW OF LITURATURE

Shehzadi, T. (2025) "Privacy-Centric Marketing: Adapting Strategies to Thrive in a Regulated Era" Shehzadi looks at how digital marketing has changed in reaction to privacy-oriented regulations. The study is centred around challenges brought by restricted data availability and opportunities of ethical, people-centric approaches. Using case studies and trends within the industry, the research presents how companies can use transparency, first party data, and future privacy-protecting technologies to stay effective, build trust, and keep pace with a quickly changing regulatory environment.

Priya, A., Arunprakash, A., Kulothungan, V., & Radha, P. (2025) "The Role of Artificial Intelligence in Revolutionizing Customer-Centric Marketing Strategies: A Data Driven Approach." This research investigates the ways in which AI technologies like machine learning, natural language processing, and predictive analytics drive customer interaction and customization. The authors outline that AI helps companies process enormous amounts of data from sources such as social media and buying histories, which results in focused marketing campaigns and enhanced customer experiences. They further discuss obstacles such as ethical issues and data privacy issues related to AI use in marketing.

Mohammed (2025) "The Importance of Big Data Analytics in Developing Marketing Strategies" a thorough study exploring how big data analytics plays a crucial role in shaping marketing strategies. The research specifically looked at how companies in the telecommunications sector, like Zain Mobile Communications, harness big data to boost customer engagement. The findings revealed that big data analytics significantly enhances marketing efficiency by facilitating targeted campaigns and offering predictive insights into customer behaviour. The study also pointed out that data analytics can help organizations lower churn rates and improve customer retention. However, it didn't shy away from discussing the hurdles, such as data security concerns, hefty implementation costs, and the necessity for skilled professionals. The research emphasized that companies need to invest in training their employees and implement robust security measures to fully reap the benefits of big data analytics. Additionally, it provided actionable recommendations for businesses looking to weave big data into their marketing strategies. Ultimately, the study concluded that the future of marketing hinges on leveraging AI-driven analytics to improve decision-making and enrich customer experiences. This research contributes to the growing recognition of the strategic value of big data in the marketing landscape.

Liu et al. (2023) "Application of Big Data Analytics in Marketing Strategy" it took a deep dive into how big data analytics is shaping modern marketing strategies. They explored how organizations harness data-driven insights to fine-tune customer segmentation, optimize pricing, and boost engagement. The research looked at real-world examples of big data in various sectors, including retail, banking, and healthcare. Their findings revealed that businesses leveraging big data analytics can significantly enhance customer

experiences by providing more relevant content and promotions. The study also pointed out how companies are using AI and machine learning to streamline data analysis, which not only improves efficiency but also cuts costs. However, the authors warned against relying too heavily on automated decision-making, as it could lead to biased results. They suggested a balanced approach that merges human expertise with AI-driven analytics. This research sheds light on how big data analytics is revolutionizing traditional marketing practices and underscores the need for ongoing innovation and data-informed decision-making to stay ahead in the competitive landscape.

Sharma, S., Chinthamu, N., Praveen, R. V. S., Mutya, B., Manikonda, L., & Deshpande, G. P. (2024) Customer Centricity Approach to Marketing: Unlocking Business Growth and Success. This FINDINGS OF THE STUDY

research paper dives into how businesses can harness personalized customer experiences, utilize data-driven insights, and adopt a customer-first mindset to foster brand loyalty and boost revenue. The study showcases successful case studies and frameworks used by top companies to effectively implement customer-centric strategies.

III. METHODOLOGY

The present study was confined to Coimbatore city. Random sampling technique was used to collect responses from the respondents. Database for the study was collected from 200 respondents through personal interview method. On completion of data collection appropriate research analytical tools such as Simple Percentage, Chi-square Correlation, and Regression analysis were applied.

TABLE 1 SIMPLE PERCENTAGE ANALYSIS

Particulars		Percentage
Age	Below 25	37
	25 to 45	55
	45 to 65	26
	65 above	32
Gender	Male	50
	Female	50
Marital Status	Married	43.3
	Unmarried	56.7
Educational Qualification	School level	22
	Diploma	40.7
	Graduate	20
	Post Graduate	17.3
Occupation	Agriculture	26.7
	Business / Self Employed	35.3
	Government Employee	16
	Private Sector Employee	22
Monthly Income	Upto 20000	30
	20000 to 30000	27.3
	30000 to 40000	17.3
	40000 and above	25.3

Source: Primary data, 2025

Findings revealed that 36.7% were aged between '25 to 45 years', gender distribution is perfectly balanced, with 50% 'male' and 50% 'female' respondents, 56.7% were 'unmarried', 40.7% hold 'Diploma', 35.3% were 'Business / Self Employed' and 27.3% received a monthly income from "20000 to 30000".

TABLE 2 DEMOGRAPHIC FACTOR AND INFLUENCE WHILE BUYING: ANOVA

Variable	Group	Mean	SD	N	t-value	F-value	Table value	Sig
Age	Below 25	2.54	1.14	37	-	2.426	-	0.068
	25-45	2.42	1.21	55	-			
	45-65	1.81	0.98	26	-			
	65Above	2.34	1.03	32	-			
Gender	Male	2.33	1.43	75	-	0.005	-	0.943
	Female	2.32	1.14	75	-			
Marital status	Married	2.32	1.14	65	-	0.001	-	0.973
	Unmarried	2.33	1.13	85	-			
Educational qualification	School level	2.39	1.14	33	-	0.389	-	0.761
	Diploma	2.34	1.16	61	-			
	Graduate	2.13	1.10	30	-			
	Post graduate	2.42	1.13	26	-			
Occupational status	agriculture	2.43	1.10	40	-	0.5	-	0.683
	Business/self employed	2.38	1.22	53	-			
	Government employee	2.08	0.97	24	-			
	Private sector employee	2.3	1.15	33	-			
Monthly income	Upto 20,000	2.27	1.09	45	-	0.28	-	0.84
	20,000 to 30,000	2.34	1.17	41	-			
	30,000 to 40,000	2.5	1.06	26	-			
	40,000 and above	2.26	1.22	38	-			

Source: Calculated data, 2025

The ANOVA (Analysis of Variance) test examines whether there are significant differences in the means of a variable across different groups. The F-value determines if there is a variance among groups, and the p-value (Sig.) indicates statistical significance (typically at $p < 0.05$).

☐ Age (F = 2.426, p = 0.068) → No significant difference in means across different age groups since $p > 0.05$.

☐ Gender (F = 0.005, p = 0.943) → No significant difference between males and females.

☐ Marital Status (F = 0.001, p = 0.973) → No significant difference between married and unmarried individuals.

☐ Educational Qualification (F = 0.389, p = 0.761) → No significant effect of education level on the variable.

☐ Occupational Status (F = 0.5, p = 0.683) → No significant difference based on occupation.

☐ Monthly Income (F = 0.28, p = 0.84) → No significant difference across income levels.

TABLE 3 DEMOGRAPHIC FACTOR AND INFLUENCE WHILE BUYING: ANOVA

CORRELATION							
Variable Spearman's Rho		Educational qualification	Purchase Behavior	Customer Data	Inquiries	Ad On social media	Email Market Ing Campaigns
Educational qualificationof the respondance	Correlation Coefficient	1	.164*	-0.031	-0.088	0.061	0.109
	Sig. (2-tailed)		0.044	0.711	0.285	0.457	0.186

	N	150	150	150	150	150	150
purchase behavior of the respondance	Correlation Coefficient	.164*	1	-.309**	-0.061	0.106	0.09
	Sig. (2-tailed)	0.044		0	0.459	0.195	0.272
	N	150	150	150	150	150	150
customer data of the respondance	Correlation Coefficient	-0.031	-.309**	1	-0.008	.166*	0.084
	Sig. (2-tailed)	0.711	0		0.926	0.042	0.306
	N	150	150	150	150	150	150
inquiries of the respondance	Correlation Coefficient	-0.088	-0.061	-0.008	1	0.009	0.135
	Sig. (2-tailed)	0.285	0.459	0.926		0.916	0.1
	N	150	150	150	150	150	150
advertisement on social media of the respondance	Correlation Coefficient	0.061	0.106	.166*	0.009	1	-.196*
	Sig. (2-tailed)	0.457	0.195	0.042	0.916		0.016
	N	150	150	150	150	150	150
email marketing campaigns of the respondance	Correlation Coefficient	0.109	0.09	0.084	0.135	-.196*	1
	Sig. (2-tailed)	0.186	0.272	0.306	0.1	0.016	
	N	150	150	150	150	150	150
	Correlation is significant at the 0.05 level (2-tailed). Correlation is significant at the 0.01 level (2-tailed).						

Source: Calculated data, 2025

The results show weak correlations among the variables. Educational qualification has a slight positive effect on purchase behavior (0.164, p=0.044). Purchase behavior is moderately negatively related to customer data usage (-0.309, p=0.000), meaning increased purchases may reduce reliance on customer data. Customer data has a weak positive link to social media ads (0.166, p=0.042). Lastly, social media ads and email marketing show a weak negative correlation (-0.196, p=0.016), suggesting that businesses focusing on social media ads may reduce email marketing efforts. Overall, the correlations are weak, indicating minimal relationships between these factors.

TABLE 4COMPARISON BETWEEN MARITAL STATUS AND MOTOR PRODUCT: CHI SQUARE

S. No	Variables	Value	df	Sig. (2-sided)
1	Pearson Chi-Square	6.377a	3	.095
2	Likelihood Ratio	6.539	3	.088
3	Linear-by-LinearAssociation	.054	1	.816
4	N of Valid Cases	150		

Source: Calculated data, 2025

- Pearson Chi-Square Value: 6.377
- Degrees of Freedom (df): 3

- Significance (p-value): 0.095

Since the p-value (0.095) is greater than the conventional significance level of 0.05, we fail to reject the null hypothesis. This means there is no strong statistical evidence to suggest an association between the variables.

TABLE 5 COMPARISON BETWEEN MARITAL STATUS AND INFLUENCE: CHI SQUARE

S. No	Variables	Value	df	Sig. (2-sided)
1	Pearson Chi-Square	.096[a]	3	.992
2	Likelihood Ratio	.096	3	.992
3	Linear-by-Linear Association	.001	1	.973
4	N of Valid Cases	150		

Source: Calculated data, 2025

- Pearson Chi-Square Value: 0.096
- Degrees of Freedom (df): 3
- Significance (p-value): 0.992

The p-value (0.992) is much greater than 0.05, indicating a very weak association. Thevariables are likely independent.

TABLE 6 COMPARISON BETWEEN MARITAL STATUS AND SENTIMENTS RECEIVING MOTORS: CHI SQUARE

S. No	Variables	Value	df	Sig. (2-sided)
1	Pearson Chi-Square	1.133[a]	3	.769
2	Likelihood Ratio	1.133	3	.769
3	Linear-by-Linear Association	.641	1	.423
4	N of Valid Cases	150		

Source: Calculated data, 2025

- Pearson Chi-Square Value: 1.133
- Degrees of Freedom (df): 3
- Significance (p-value): 0.769

The p-value (0.769) is much greater than 0.05, meaning there is no statistically significant association between the variables.

IV. CONCLUSION

The findings emphasize the significance of key takeaways, highlighting their relevance within the specific domain. The results add valuable insights to the existing body of knowledge, offering fresh perspectives on the subject and effectively addressing core research questions. The recommendations presented aim to fill existing gaps, improve operational efficiency, and support progress in the broader research area. The proposed strategies are intended to produce tangible improvements within the targeted sector.

By adopting these suggestions, stakeholders can anticipate benefits such as enhanced efficiency, better-informed decision-making, and potential advancements in policy or practice. Further research is encouraged to validate and build upon these insights, ensuring continued growth and innovation in the field. A multidisciplinary approach integrating views from related disciplines may further enrich the findings and broaden their impact. Overall, the conclusions of this study provide a solid foundation for future dialogue, research, and development within the specified industry or academic domain.

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