

**EFFECT OF AI-DRIVEN CUSTOMER ANALYTICS ON CUSTOMER TARGETING, PERSONALIZATION, AND MARKETING PERFORMANCE: AN EMPIRICAL STUDY IN CHENNAI****<sup>1</sup>Dr. K.M SRIVIDHYA, <sup>2</sup>Dr. T. Vaidegi, <sup>3</sup>Ms. Meenu Rekha C B, <sup>4</sup>Dr Reena F**<sup>1</sup>Assistant Professor, Department of Commerce, Annai Violet Arts & Science College, Chennai.<sup>2</sup>Assistant Professor, PG & Research Department of Commerce, Patrician College of Arts & Science, Chennai.<sup>3</sup>Research Scholar, PG and Research Department of Commerce, Dwaraka Doss Goverdhan Doss Vaishnav College, Chennai<sup>4</sup>Assistant professor, Department of B.Com (Honours), Loyola College, Chennai.**Abstract**

The rapid advancement of Artificial Intelligence (AI) has significantly transformed modern marketing practices, particularly through AI-driven customer analytics. This study examines the effects of AI-driven customer analytics on customer targeting, personalization, and marketing performance in Chennai. A quantitative research approach was adopted, and primary data were collected from 96 respondents using a structured questionnaire based on a 5-point Likert scale. The data were analysed using statistical tools, including reliability analysis, correlation, and regression, with SPSS. The findings of the study reveal that AI-driven customer analytics has a significant positive impact on both customer targeting and personalization. Furthermore, both customer targeting and personalization were found to significantly influence marketing performance, with personalization showing a relatively stronger effect. The results also indicate that AI-driven customer analytics has a direct and significant impact on marketing performance. These findings highlight the importance of AI as a strategic tool in enhancing marketing effectiveness through improved decision-making and customer engagement. The study concludes that organizations adopting AI-driven customer analytics can achieve better marketing performance by strengthening their targeting and personalization strategies. The research contributes to the existing literature by providing empirical evidence from Chennai and offers practical insights for marketers to leverage AI technologies for competitive advantage.

**Keywords:** Artificial Intelligence, Customer Analytics, Customer Targeting, Personalization, Marketing Performance.**INTRODUCTION**

In the contemporary digital economy, marketing has undergone a profound transformation driven by rapid advancements in Artificial Intelligence (AI) and data analytics. Organizations are increasingly leveraging AI-driven customer analytics to extract meaningful insights from vast volumes of consumer data, enabling more precise decision-making and enhanced marketing effectiveness. AI-driven analytics refers to the use of machine learning algorithms, predictive modeling, and data mining techniques to analyze customer behavior, preferences, and interactions across multiple digital touchpoints. This paradigm shift has redefined how businesses understand, target, and engage customers in highly competitive markets. One of the most significant contributions of AI-driven customer analytics lies in its ability to improve customer targeting. Traditional targeting approaches relied heavily on demographic segmentation and broad market categorization, leading to generalized marketing strategies. However, AI enables firms to adopt micro-segmentation by analyzing behavioral patterns, purchase history, browsing activity, and real-time engagement data. This allows organizations to identify high-value customer segments with greater accuracy and deliver tailored marketing messages, thereby improving conversion rates and customer acquisition efficiency.

In addition to targeting, AI-driven analytics plays a crucial role in enhancing personalization strategies. Modern consumers expect personalized experiences that align with their preferences and needs. AI facilitates dynamic personalization by delivering customized product recommendations, personalized advertisements, and individualized communication across digital platforms. Through techniques such as recommendation engines and sentiment analysis, firms can create highly relevant customer experiences, which not only increase satisfaction but also strengthen brand loyalty and long-term engagement. Furthermore, the integration of AI-driven analytics significantly impacts marketing performance. By enabling data-driven decision-making, AI helps organizations optimize marketing campaigns, allocate resources efficiently, and measure performance with greater precision. Key performance indicators such as customer acquisition cost, conversion rate, return on investment (ROI), and customer lifetime value are positively influenced by the effective use of AI analytics. As a result, businesses can achieve improved marketing outcomes and sustainable competitive advantage. Despite the growing adoption of AI-driven customer analytics globally, its application and impact in emerging markets like India, particularly in metropolitan cities such as Chennai, require further empirical investigation. Chennai, a prominent hub for IT services, retail, and digital commerce, offers a unique context in which businesses are increasingly adopting AI technologies to enhance marketing strategies. However, there is limited empirical evidence examining how AI-driven analytics influences customer targeting, personalization, and overall marketing performance within this regional context.

This study aims to bridge this research gap by empirically analyzing the effect of AI-driven customer analytics on customer targeting, personalization, and marketing performance among organizations in Chennai. By examining the interrelationships between these variables, the study seeks to provide valuable insights for marketers, practitioners, and researchers on the strategic role of AI in modern marketing practices. The findings are expected to contribute to both academic literature and practical applications by offering a deeper understanding of how AI-driven analytics can be leveraged to enhance marketing effectiveness in a rapidly evolving digital landscape.

**LITERATURE REVIEW**

**AI-Driven Customer Analytics:** Recent studies emphasize that Artificial Intelligence (AI) has become a core enabler of data-driven marketing, transforming how firms analyze and utilize customer data. AI-driven analytics leverages machine learning, predictive modeling, and big data techniques to generate actionable insights from large datasets. According to Amin et al. (2025), AI significantly enhances decision-making, operational efficiency, and customer engagement by enabling firms to predict customer needs and optimize marketing strategies.

Similarly, Kumar et al. (2024) highlight that AI serves as a dynamic capability, enabling organizations to adapt quickly to changing market environments and customer expectations. AI-powered analytics tools such as sentiment analysis and recommendation engines enable firms to extract deep behavioral insights from structured and unstructured data, thereby improving strategic marketing decisions (Islam et al., 2025).

However, recent literature also identifies challenges such as data privacy concerns, ethical issues, and technological readiness, which can hinder effective AI adoption (Amin et al., 2025)

**Customer Targeting:** AI has significantly transformed customer targeting from traditional segmentation to precision-based micro-targeting. Modern AI systems analyze behavioral data, browsing patterns, and transaction histories to identify high-value customer segments.

Recent empirical findings indicate that AI-driven targeting improves accuracy, efficiency, and campaign effectiveness by enabling real-time customer profiling and segmentation (Beyari, 2025) (PMC). AI tools can continuously update customer data, enabling marketers to adjust targeting strategies as consumer behavior evolves dynamically.

Furthermore, predictive analytics enhances targeting by forecasting customer preferences and purchase intentions, leading to improved customer acquisition and retention rates (Acatrinei et al., 2025) (MDPI). Despite these advantages, researchers highlight that over-reliance on AI may lead to algorithmic bias and reduced human oversight.

**Personalization:** Personalization remains one of the most impactful applications of AI in marketing. AI-driven personalization uses algorithms to deliver customized content, recommendations, and communication tailored to individual customer preferences.

Recent studies show that AI-based personalization significantly improves customer engagement, satisfaction, and loyalty. For instance, Gunawan and Suroso (2025) report that AI personalization can increase conversion rates by up to 30% and customer loyalty by up to 84%.

Similarly, Hardcastle (2025) finds that AI-driven recommendations and personalized advertisements strongly influence customer experience and purchase behavior. AI technologies such as natural language processing (NLP), chatbots, and recommendation systems enable firms to deliver real-time personalized interactions.

However, recent literature also highlights concerns related to privacy, data security, and over-personalization, which may negatively affect customer trust if not managed properly (Gunawan & Suroso, 2025).

**Marketing Performance:** AI-driven analytics plays a critical role in enhancing marketing performance by enabling data-driven decision-making and performance optimization. Marketing performance is typically measured through indicators such as conversion rates, return on investment (ROI), customer lifetime value, and customer retention. Recent research indicates that AI improves marketing performance by enabling real-time campaign optimization, predictive forecasting, and efficient resource allocation (Amin et al., 2025). AI also enhances customer engagement through interactive, personalized communication, thereby directly improving marketing outcomes (Acatrinei et al., 2025).

In the Indian context, studies show that AI-driven marketing analytics significantly influences consumer trust, purchase intention, and decision-making, thereby improving overall marketing effectiveness (Manjare et al., 2025).

Recent literature clearly establishes that AI-driven customer analytics is a transformational force in marketing, significantly enhancing customer targeting, personalization, and overall marketing performance. However, the lack of integrated empirical studies in specific regional contexts highlights the need for further research.

This study addresses this gap by empirically examining the interrelationship between AI-driven customer analytics, customer targeting, personalization, and marketing performance in Chennai, thereby contributing to both academic and practical domains.

### OBJECTIVES OF THE STUDY

1. To study the effect of AI-driven customer analytics on customer targeting
2. To examine the impact of AI-driven customer analytics on personalization
3. To analyse the relationship between customer targeting and marketing performance
4. To study the effect of personalization on marketing performance
5. To examine the overall impact of AI-driven customer analytics on marketing performance

### HYPOTHESES OF THE STUDY

**H1:** AI-driven customer analytics significantly affect customer targeting

**H2:** AI-driven customer analytics significantly affect personalization

**H3:** Customer targeting significantly affects marketing performance

**H4:** Personalization significantly affects marketing performance

**H5:** AI-driven customer analytics significantly affect marketing performance

### CONCEPTUAL FRAMEWORK

The conceptual framework of this study explains, in a structured manner, the relationships among AI-driven customer analytics, customer targeting, personalization, and marketing performance. In this study, AI-driven customer analytics is treated as the independent variable, as it plays a key role in shaping marketing strategies through data-driven insights. By leveraging advanced technologies such as machine learning and predictive analytics, organizations can better understand customer behavior and preferences.

Customer targeting and personalization are treated as mediating variables in the framework. AI-driven customer analytics enhances customer targeting by enabling firms to identify and segment the most relevant customer groups based on behavioral and transactional data. At the same time, it improves personalization by allowing organizations to deliver customized products, services, and communication tailored to individual customer needs. These two factors act as important mechanisms through which AI influences marketing outcomes. Marketing performance is considered the dependent variable in this study. Effective customer targeting helps organizations reach the right audience, leading to higher conversion rates and more efficient marketing campaigns. Similarly, personalization enhances customer satisfaction, engagement, and loyalty, which ultimately contributes to better marketing performance. In addition to these indirect effects, AI-driven customer analytics also directly influences marketing performance by improving decision-making, optimizing marketing strategies, and enabling real-time campaign adjustments. Thus, the framework suggests that AI-driven customer analytics not only directly affects marketing performance but also indirectly influences it through customer targeting and personalization, making it a comprehensive model for understanding modern data-driven marketing practices.



### RESEARCH METHODOLOGY

This study adopts a quantitative research approach to examine the effect of AI-driven customer analytics on customer targeting, personalization, and marketing performance. A descriptive-analytical research design is used to understand the relationships among variables. The study is based on primary data collected through a structured questionnaire. The questionnaire uses a 5-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree” to measure respondents’ opinions. The study sample comprises 96 respondents selected from individuals in Chennai who are familiar with digital platforms and AI-based services. Convenience sampling is used for data collection due to accessibility and time constraints. The collected data is analysed using SPSS software. Statistical tools such as reliability analysis, descriptive statistics, correlation, and regression are used to test hypotheses and examine relationships among variables.

In this study, AI-driven customer analytics is the independent variable, marketing performance the dependent variable, and customer targeting and personalization the key influencing factors. Although the study is limited to a small sample size and a specific location, it provides useful insights into the role of AI in modern marketing practices.

**DATA ANALYSIS AND INTERPRETATION**

The collected data from 96 respondents was analysed using SPSS to examine the relationships between AI-driven customer analytics, customer targeting, personalization, and marketing performance.

**Reliability Analysis**

Reliability analysis was conducted using Cronbach’s Alpha to test the internal consistency of the measurement scale.

Variable	Cronbach’s Alpha
AI-Driven Customer Analytics	0.842
Customer Targeting	0.801
Personalization	0.823
Marketing Performance	0.857

The reliability of the measurement scale was assessed using Cronbach’s Alpha to examine the internal consistency of the constructs. The results indicate that all variables exhibit strong reliability, with their alphas exceeding the recommended threshold of 0.70. Specifically, AI-Driven Customer Analytics recorded a Cronbach’s Alpha of 0.842, indicating high internal consistency among its items. Customer Targeting showed a reliability value of 0.801, reflecting acceptable to good consistency. Personalization also demonstrated strong reliability with an alpha value of 0.823. Among all variables, Marketing Performance reported the highest reliability coefficient of 0.857, indicating a very high level of internal consistency. Overall, the findings confirm that all constructs used in the study are reliable and suitable for further statistical analysis, as the measurement items consistently represent their respective variables.

**Descriptive Statistics**

Variable	Mean	Std. Deviation
AI-Driven Customer Analytics	3.98	0.62
Customer Targeting	4.05	0.58
Personalization	4.02	0.60
Marketing Performance	4.10	0.55

The descriptive statistics indicate that the mean values of all variables, AI-Driven Customer Analytics (3.98), Customer Targeting (4.05), Personalization (4.02), and Marketing Performance (4.10), are above the midpoint value of 3.5. This suggests that respondents generally hold a positive perception of the adoption and effectiveness of AI-driven marketing practices. Among the variables, Marketing Performance has the highest mean score, indicating that respondents perceive noticeable improvements in marketing outcomes due to AI integration. Customer Targeting and Personalization also show relatively high mean values, reflecting favorable opinions regarding the precision and customization enabled by AI technologies. The standard deviation values, ranging from 0.55 to 0.62, indicate moderate variability in responses, suggesting a reasonable degree of consensus among respondents. Overall, the results imply that AI-driven customer analytics positively influence targeting, personalization, and overall marketing performance, as perceived by the respondents.

**Correlation Analysis**

Variables	AI Analytics	Targeting	Personalization	Marketing Performance
AI Analytics	1	0.68**	0.71**	0.65**
Customer Targeting	0.68**	1	0.66**	0.72**
Personalization	0.71**	0.66**	1	0.75**
Marketing Performance	0.65**	0.72**	0.75**	1

The correlation analysis examined the relationships among AI-Driven Customer Analytics, Customer Targeting, Personalization, and Marketing Performance. The results reveal that all variables are positively and significantly correlated with each other at the 0.01 level ( $p < 0.01$ ), indicating strong interrelationships among the constructs.

AI-Driven Customer Analytics shows a strong positive correlation with Personalization ( $r = 0.71$ ) and Customer Targeting ( $r = 0.68$ ), suggesting that AI analytics enhances both customer targeting and the delivery of personalized experiences. It also has a substantial positive relationship with Marketing Performance ( $r = 0.65$ ), indicating that improved analytics contributes to better marketing outcomes.

Customer Targeting is strongly correlated with Marketing Performance ( $r = 0.72$ ), indicating that targeted strategies significantly improve marketing effectiveness. Similarly, Personalization shows the highest correlation with Marketing Performance ( $r = 0.75$ ), suggesting that personalized marketing efforts play a critical role in improving overall performance.

Overall, the findings suggest that AI-driven analytics, targeting, and personalization are closely interconnected and collectively contribute to improved marketing performance. The strength and significance of these relationships support the proposed conceptual model and justify further analysis using regression techniques.

**Regression Analysis**

Model	Model Title	Variable	Beta	Sig.
Model 1	AI-Driven Analytics → Customer Targeting	AI-Driven Customer Analytics	0.68	0.000
Model 2	AI-Driven Analytics → Personalization	AI-Driven Customer Analytics	0.71	0.000
Model 3	Targeting & Personalization → Marketing Performance	Customer Targeting	0.41	0.000
	Targeting & Personalization → Marketing Performance	Personalization	0.49	0.000
Model 4	AI-Driven Analytics → Marketing Performance	AI-Driven Customer Analytics	0.65	0.000

The regression analysis examined the impact of AI-Driven Customer Analytics on Customer Targeting, Personalization, and Marketing Performance, as well as the combined effect of Targeting and Personalization on Marketing Performance.

In Model 1, AI-Driven Customer Analytics has a strong and positive impact on Customer Targeting ( $\beta = 0.68, p < 0.001$ ). This indicates that AI analytics significantly enhances the organization's ability to identify and reach the right customer segments.

In Model 2, AI-Driven Customer Analytics also shows a significant positive influence on Personalization ( $\beta = 0.71, p < 0.001$ ). This suggests that AI tools play a crucial role in enabling customized marketing strategies tailored to individual customer preferences.

In Model 3, both Customer Targeting ( $\beta = 0.41, p < 0.001$ ) and Personalization ( $\beta = 0.49, p < 0.001$ ) significantly influence Marketing Performance. Among the two, Personalization demonstrates a stronger impact, indicating that tailored marketing approaches improve performance outcomes more effectively than targeting alone. In Model 4, AI-Driven Customer Analytics directly affects Marketing Performance ( $\beta = 0.65, p < 0.001$ ), confirming that adopting AI analytics enhances marketing efficiency and effectiveness. Overall, all regression models are statistically significant, and the results confirm that AI-Driven Customer Analytics not only directly improves Marketing Performance but also indirectly enhances it through Customer Targeting and Personalization. These findings strongly support the proposed research framework and validate the hypothesized relationships among the variables.

#### **FINDINGS & RECOMMENDATIONS**

The study's findings reveal that AI-driven customer analytics plays a significant role in enhancing marketing effectiveness. The analysis shows that AI-driven analytics has a strong positive influence on both customer targeting and personalization, indicating that organizations using AI tools are better able to identify the right customers and deliver customized marketing strategies. Among the influencing factors, personalization is found to have a slightly stronger impact on marketing performance compared to customer targeting, suggesting that tailored customer experiences are a key driver of improved marketing outcomes. In addition, AI-driven customer analytics also has a direct and significant effect on marketing performance, highlighting its importance as a strategic tool in modern marketing practices.

Based on these findings, it is recommended that organizations invest more in AI-driven analytics technologies to improve their marketing strategies. Firms should focus on enhancing their data collection and analysis capabilities to understand customer behavior and preferences better. Emphasis should be given to developing advanced personalization strategies, such as customized recommendations and targeted communication, to improve customer engagement and satisfaction. Organizations should also ensure proper training and skill development for employees to utilize AI tools effectively. Furthermore, companies must address data privacy and security concerns to build customer trust while implementing AI-based marketing practices. By adopting these strategies, businesses can improve marketing performance and gain a competitive advantage.

#### **CONCLUSION**

The present study examined the effects of AI-driven customer analytics on customer targeting, personalization, and marketing performance in Chennai. The results clearly indicate that AI-driven customer analytics plays a vital role in transforming modern marketing practices by enabling data-driven decision-making and enhancing overall marketing effectiveness. The study confirms that AI significantly improves customer targeting by helping organizations identify and reach the most relevant customer segments with greater accuracy.

Furthermore, the findings highlight that AI-driven analytics enhances personalization, allowing firms to deliver customized experiences that align with individual customer preferences. Among the factors studied, personalization emerged as a strong contributor to marketing performance, emphasizing the growing importance of personalized marketing in today's competitive environment. The study also establishes that both customer targeting and personalization positively influence marketing performance, leading to improved customer engagement, higher conversion rates, and better return on marketing investments. In addition, AI-driven customer analytics was found to have a direct impact on marketing performance, indicating that its benefits extend beyond indirect effects through targeting and personalization. This demonstrates that AI is not only a supportive tool but also a strategic asset for organizations aiming to improve their marketing outcomes.

Overall, the study concludes that the effective use of AI-driven customer analytics can significantly enhance marketing performance by strengthening customer targeting and personalization strategies. The findings provide valuable insights for marketers and organizations in Chennai and similar markets, encouraging the adoption of AI technologies to achieve sustainable growth and competitive advantage in the evolving digital landscape.

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