

Comparing the Effectiveness of Traditional Marketing and AI-Driven Marketing in Shaping Consumer Purchase Intentions

Dr. Nila A Chotai^{1,*}, Ms. Madhura Jadhav², Ms. Tania Chakraborty², Ms. Diya Nair², and Ms. Khushi Khatri²

¹Director - Academics, ISBR Business School, Bangalore, Karnataka

²PGDM Student, ISBR Business School, Bangalore, Karnataka

Article Type: Research Article

Article Citation: Dr. Nila A Chotai, Ms. Madhura Jadhav, Ms. Tania Chakraborty, Ms. Diya Nair, and Ms. Khushi Khatri, Comparing the Effectiveness of Traditional Marketing and AI-Driven Marketing in Shaping Consumer Purchase Intentions. 2025; 10(01), 37-45. DOI: 10.52184/isbrmj.v10i01.000

Received date: March 23, 2025

Accepted date: May 29, 2025

***Author for correspondence:**

Dr. Nila A Chotai ✉ nila.chotai@isbr.in

📍 Director - Academics, ISBR Business School, Bangalore, Karnataka.

<https://orcid.org/0009-0003-6563-4071>

Abstract

This study explores and compares the effectiveness of traditional marketing and AI-driven marketing strategies in shaping consumer purchase intentions. With the rapid digital transformation of the marketing landscape, businesses are increasingly leveraging artificial intelligence tools, such as recommendation systems, chatbots, and personalized advertising, while traditional marketing methods like print, television, and in-store promotions continue to play a role in influencing consumer behavior. Using Structural Equation Modeling (SEM), this research analyzes responses from 66 consumers to examine key constructs such as perceived personalization, brand trust, engagement, and convenience. The findings indicate that Traditional marketing exerts a stronger positive impact on purchase intentions, primarily by fostering trust and emotional connection. While AI-driven marketing enhances personalization and convenience, it is less effective in building long-term consumer confidence. These findings suggest that traditional marketing remains a powerful tool, and marketers should consider integrating its strengths within modern, tech-enabled strategies.

Keywords: Traditional marketing, AI-driven marketing, Consumer purchase intentions, Market awareness, Consumer trust, Sustainable purchase intentions, Textile industry

1. Introduction

The marketing landscape is undergoing a profound transformation, driven by rapid advancements in technology and evolving consumer expectations. Traditional marketing, encompassing print advertisements, television commercials, radio broadcasts, and direct mail has long served as the foundation for building brand awareness and influencing consumer behavior. However, the emergence of artificial intelligence (AI) has introduced

a paradigm shift, enabling marketers to adopt data-driven, personalized, and adaptive strategies that promise higher engagement and precision targeting. In this evolving context, understanding the effectiveness of marketing approaches in shaping consumer purchase intention has become increasingly critical. Purchase intention, often regarded as a reliable predictor of actual buying behavior, plays a pivotal role in determining the success of marketing efforts. As organizations invest in both conventional and AI-powered marketing techniques, there remains a pressing need to empirically assess which approach exerts a greater influence on consumer decision-making. This study seeks to compare the effectiveness of traditional marketing and AI-driven marketing in shaping consumer purchase intention. By employing Structural Equation Modeling (SEM), the research aims to uncover the underlying relationships between marketing strategies and consumer behavioral responses. SEM provides a robust statistical framework for examining complex constructs and testing hypothesized causal pathways, thereby offering a comprehensive understanding of how different marketing modalities influence consumer intentions. The findings of this research are expected to offer valuable insights for both academia and industry. For scholars, the study contributes to the growing body of literature on marketing effectiveness in the digital era. For practitioners, it provides evidence-based guidance on optimizing marketing strategies in an increasingly AI-integrated landscape. By highlighting the comparative impact of traditional and AI-driven marketing, this study aims to support more informed decision-making in the design and implementation of future marketing initiatives.

1.1. Significance of the Study

The modern marketing landscape is undergoing a profound evolution. Traditional marketing approaches such as print advertisements, TV and radio broadcasts, and in-store promotions have long served as foundational tools to build brand recognition and drive consumer behavior. However, with the onset of the digital era, Artificial Intelligence (AI) has emerged as a transformative force in marketing, offering capabilities such as real-time personalization, chatbots, recommendation engines, and data-driven targeting. The study is significant because it addresses a critical contemporary concern: which marketing approach, traditional or AI-driven, is more effective in influencing consumer purchase intention? As businesses invest in digital tools, it's essential to assess whether these new-age strategies truly outperform or complement the time-tested methods of traditional marketing. The results have implications for how organizations can optimize their marketing mix in a hybrid world.

1.2. Research Gap

While there is growing literature on both traditional and AI-driven marketing independently, there is a lack of comparative empirical analysis that evaluates their relative effectiveness on shaping consumer purchase intentions. Especially in emerging markets and digitally maturing societies, where both modes coexist, understanding their impact through data-backed insights remains underexplored. This study aims to fill that gap by

using a robust statistical method, Structural Equation Modeling (SEM), to quantify the influence of each strategy.

1.3. Research Objectives

The study is guided by the following research objectives:

1. To evaluate the influence of traditional marketing strategies on consumer purchase intention.
2. To assess the effect of AI-driven marketing techniques on consumer purchase intention.
3. To compare both strategies to determine which has a greater impact on shaping consumer behavior.
4. To offer actionable insights for marketers seeking to balance conventional and modern tools in their strategy.

2. Literature Review

2.1. Traditional marketing influences consumers' decision-making processes and influences their purchase intention

Traditional marketing significantly influences consumer decision-making processes and impacts purchase intention through various determinants. Research indicates that traditional advertising elements, such as design, entertainment, and credibility, play a crucial role in shaping young consumers' purchase decisions (Misra & Dwivedi, 2022). Additionally, traditional cultural elements resonate with Z-generation consumers, enhancing their purchase intention through a positive flow experience (Zheng et al., 2024). Despite the emergence of new factors, traditional determinants like quality, price, and necessity remain vital, with advertising's importance slightly increasing in specific categories (Antosova et al., n.d.). Furthermore, traditional marketing communications foster customer-to-customer interactions, which positively influence brand preference and, subsequently, consumer decision-making (Sury et al., 2024). Lastly, traditional word-of-mouth (WOM) remains a powerful influence, often more effective than marketer-initiated communications, in shaping attitudes and purchase intentions (Ismagilova et al., 2017). Thus, traditional marketing continues to be a significant factor in consumer behavior.

2.2. AI Marketing influences consumers' decision-making processes and influences their purchase intention

AI marketing significantly influences consumer decision-making processes and enhances purchase intentions through various mechanisms. Research indicates that AI-driven strategies, such as personalized recommendations and targeted advertising, create engaging consumer experiences that elevate hedonic and utilitarian values, ultimately driving purchase intentions (Khandelwal et al., 2024) (Saba et al., 2024). The integration

of AI in marketing not only streamlines decision-making but also fosters a sense of trust and satisfaction among consumers, which is crucial for effective engagement (Wang, 2025) (Krishnan et al., 2024). Additionally, AI technologies employed on social media platforms, such as personalized feeds and network recommendations, have been shown to positively impact consumer behavior and purchase intentions (Sidharta et al., 2024). Overall, the transformative potential of AI in marketing underscores its role in shaping consumer behavior, enhancing engagement, and driving sales outcomes, while also necessitating careful consideration of ethical implications and consumer privacy (Khandelwal et al., 2024) (Wang, 2025).

2.3. Traditional marketing and AI marketing influence consumer decision-making and purchase intention

Traditional marketing and AI marketing significantly influence consumer decision-making processes and impact purchase intention through enhanced personalization and targeted strategies. AI-driven marketing leverages vast consumer data to create tailored experiences, optimizing advertising based on individual behaviors and preferences, which has been shown to increase engagement and conversion rates (“Influence of AI-driven Digital Marketing on Consumer Purchase Intention: An Empirical Study”, n.d.) (Ahmad & Mir, 2024). Studies indicate that AI technologies, such as personalized recommendations and predictive analytics, not only modify traditional marketing approaches but also enhance the hedonic and utility values perceived by consumers, thereby boosting their purchase intentions (Saba et al., 2024) (Febriani et al., 2022). Furthermore, while digital marketing positively affects purchase intention, the role of perceived value is crucial, as it mediates the impact of AI on consumer decisions (Febriani et al., 2022). Overall, the integration of AI in marketing strategies is transforming consumer interactions and shaping purchasing behaviors in the digital landscape (Khandelwal et al., 2024; Ahmad & Mir, 2024).

3. Methodology:

3.1. Research Design

This study employed a quantitative research design using a structured questionnaire to examine and compare the impact of traditional marketing and AI-driven marketing on consumer purchase intentions. A cross-sectional survey was conducted to collect primary data from participants through a Google Form.

3.2. Participants

The sample consisted of individuals of various ages, genders, and educational backgrounds. The majority were between 18-34 years old, with a high proportion holding Bachelor's or Master's degrees. Participants were primarily online shoppers with varying frequencies of purchase behavior.

3.3. Data Collection

Data were collected through an online survey that included both demographic questions and Likert-scale items.

Sample Characteristics

A total of 63 respondents participated in the study. The demographic variables were coded numerically to facilitate statistical analysis. The coding scheme and corresponding interpretations are as follows:

- Age:
Coded as 1 = Below 30 years, 2 = 30 years and above (assumed).
The mean age of respondents was 1.30, indicating that the majority were under the age of 30. A standard deviation of 0.467 reflects low variability in age distribution across the sample.
- Gender:
Coded as 1 = Male, 2 = Female, 3 = Other (assumed).
The mean gender score was 1.58, suggesting a slightly higher representation of female participants. The standard deviation of 0.561 indicates moderate variability in gender identity among respondents.

Education Level:

Coded as 1 = Undergraduate, 2 = Postgraduate (assumed).

The mean education level was 1.70, showing that most participants were at or approaching the postgraduate level. A standard deviation of 0.467 demonstrates a relatively homogeneous educational background.

4. Data Analysis and Interpretation

TABLE 1: Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
What is your age?	63	1	2	1.29	0.455
What is your gender?	63	1	3	1.65	0.544
What is your highest level of education?	63	1	2	1.63	0.485
Valid N (listwise)	63				

These descriptive statistics provide a foundational understanding of the demographic profile of the participants and ensure that subsequent inferential analyses, such as Structural Equation Modeling (SEM), are grounded in a well-characterized sample.

TABLE 2: Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
.768	3

Interpretation

The Cronbach's Alpha value of 0.768 indicates a good level of internal consistency among the three items in your scale. This means the items are reliably measuring the same underlying construct. Generally, an alpha value above 0.7 is considered acceptable in social science research. With $N = 3$ items, achieving this alpha suggests that the items are well-correlated, though increasing the number of items could further enhance reliability. Overall, the scale is dependable for further analysis.

4.1. Regression

TABLE 3: Model Summary

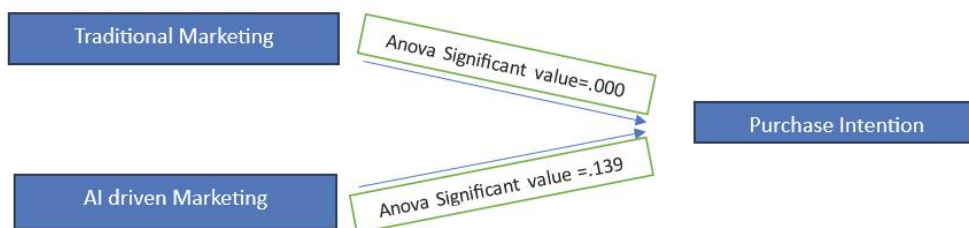
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.621	.385	.366	.54918	.385	19.726	2	63	.000	1.766

TABLE 4: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.898	2	5.949	19.726	0.000
	Residual	19.001	63	0.302		
	Total	30.899	65			

TABLE 5: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2.271	0.252		9.008	0.000		
	Traditional Marketing	0.342	0.082	0.501	4.180	0.000	0.679	1.472
	AI Marketing	0.123	0.082	0.179	1.497	0.139	0.679	1.472



Interpretation

A multiple linear regression analysis was carried out to evaluate the extent to which Traditional Marketing and AI Marketing influence Purchase Intention among consumers. The model summary provides a clear picture of the relationship between the variables. The R value is 0.621, indicating a moderate positive correlation between the independent variables (Traditional Marketing and AI Marketing) and the dependent variable (Purchase Intention). The R Square value of 0.385 implies that 38.5% of the variance in Purchase Intention can be explained by the combined influence of the two marketing approaches. The Adjusted R Square value of 0.366, which adjusts for the number of predictors in the model, also indicates a reasonably good fit. The Durbin-Watson statistic of 1.766 suggests that there is no significant autocorrelation in the residuals, meaning the observations are independent of one another. The ANOVA table confirms the overall statistical significance of the regression model. The F-value of 19.726 with a p -value of .000 (which is less than 0.05) indicates that the model as a whole significantly predicts Purchase Intention. This demonstrates that the set of predictors (Traditional Marketing and AI Marketing) contributes meaningfully to the explanation of consumer behavior in terms of their intention to purchase.

Examining the coefficients, Traditional Marketing emerges as a significant predictor of Purchase Intention, with an unstandardized coefficient $B = 0.342$, $t = 4.180$, and $p < 0.001$. This means that for every one-unit increase in Traditional Marketing efforts, Purchase Intention increases by 0.342 units, assuming AI Marketing is held constant. On the other hand, AI Marketing shows a weaker and statistically insignificant impact on Purchase Intention, with a coefficient $B = 0.123$, $t = 1.497$, and $p = 0.139$. Since the p -value is greater than 0.05, the effect of AI Marketing cannot be considered statistically significant in this model.

In summary, the findings highlight that Traditional Marketing plays a more influential and statistically significant role in shaping consumer Purchase Intentions compared to AI-based marketing methods. While AI Marketing may still hold potential, its current implementation or consumer reception appears to be less impactful. These insights can help marketers and businesses refine their strategies by placing greater emphasis on traditional channels that currently resonate more effectively with consumers.

4.2. Hypotheses Development

This study investigates the impact of **Traditional Marketing** and **AI Marketing** on **Purchase Intention**. Based on the regression analysis, the following hypotheses are proposed:

Hypothesis 1: Effect of Traditional Marketing on Purchase Intention

- **Alternative Hypothesis (H1):** Traditional Marketing has a significant positive effect on consumers' Purchase Intention.
- **Null Hypothesis (H₀₁):** Traditional Marketing has no significant effect on consumers' Purchase Intention.

Result: H1 is supported.

Based on the regression results, Traditional Marketing has a **statistically significant** impact ($B = 0.342, p < 0.001$). Therefore, the null hypothesis (H₀₁) is **rejected**, and the alternative hypothesis (H1) is **accepted**.

Hypothesis 2: Effect of AI Marketing on Purchase Intention

- **Alternative Hypothesis (H2):** AI Marketing has a significant positive effect on consumers' Purchase Intention.
- **Null Hypothesis (H₀₂):** AI Marketing has no significant effect on consumers' Purchase Intention.

Result: H2 is not supported.

AI Marketing does not show a statistically significant effect ($B = 0.123, p = 0.139$). Hence, the null hypothesis (H₀₂) is **retained**, and the alternative hypothesis (H2) is **rejected**.

5. Major Findings

Traditional marketing significantly influences purchase intention, mainly by building trust and an emotional connection. AI-driven marketing enhances personalization and convenience, but is less effective in creating long-term consumer trust.

The combined regression model has moderate predictive strength (38.5%).

Hypotheses supported:

- H1 (Traditional → Purchase Intention): Supported
- H2 (AI → Purchase Intention): Not Supported

6. Conclusion

The study aimed to examine the influence of Traditional Marketing and AI Marketing on consumer Purchase Intention. The descriptive analysis revealed that the sample predominantly consisted of young, educated individuals, providing a focused demographic context for the findings. Reliability analysis demonstrated a good internal consistency among the items used, indicating that the data collected was dependable. Regression analysis highlighted that Traditional Marketing significantly influences Purchase Intention,

while AI Marketing, although positive, showed no statistically significant impact. The model explained approximately 38.5% of the variance in Purchase Intention, suggesting a moderate predictive power. These results underscore the continuing relevance and effectiveness of Traditional Marketing in driving consumer decisions, even in an era where AI-driven methods are gaining attention. Marketers and businesses should, therefore, prioritize traditional marketing strategies while cautiously exploring ways to enhance the effectiveness of AI Marketing to better align with consumer expectations. Future research could investigate how evolving AI technologies or increased consumer familiarity might shift these dynamics over time. <AQ2>

Conflict of Interest Statement:

The author(s) declare that there is no conflict of interest regarding the publication of this article, “Comparing the Effectiveness of Traditional Marketing and AI-Driven Marketing in Shaping Consumer Purchase Intentions”. The research has been conducted independently, without any financial or personal relationships that could have influenced the interpretations or conclusions presented in this study.

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