

A STUDY ON THE EFFECTIVENESS OF AI- DRIVEN PROMOTIONAL MEDIA ON CONSUMER PURCHASE INTENTION.**Zayeda Khan¹ and Tejal Shroff²**

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ABSTRACT

This study analyses the effectiveness of artificial intelligence (AI) driven promotional media on consumer purchase intention. The research sheds light on marketing communication influencing the nature of promotional media and digital marketing. AI-driven promotional tools, such as personalized advertisements, recommendation systems, chatbots, and AI-generated content, help businesses to deliver targeted and real-time promotional messages to consumers. The study gave special emphasis on consumer perception, trust and personalization, as it aims to examine the effectiveness of AI-driven promotional media. The research is based on the primary and secondary data sources and adopts a descriptive and analytical research design. The main primary data is gathered via a structured questionnaire given to consumers who frequently encounter digital and AI-driven promotional material. Secondary data were collected from relevant journals, research articles, and online sources to build the theoretical basis of the study. This study explores the possibilities, efficiency and accuracy AI brings in advertising, particularly when we talk about consumer preference. The findings showed the limitations such as dynamic and changing consumer nature and ethical challenges related to privacy. The findings further enable future researchers to focus on the application of AI in promotion and study long-term consumer behaviour with deeper analysis to enhance the effectiveness of AI-driven marketing. Finally, this study will provide directions to marketers for their marketing and promotional practices regarding consumer buying patterns, brand loyalty and profit-earning sales targets.

Keywords: Artificial Intelligence (AI), Promotional Media, Digital Marketing, Consumer Purchase Intention, Consumer Behaviour, Online Advertising.)

1. INTRODUCTION

In this ever-fast-moving world, rapid advancements and evolution of digital technology are making remarkable changes in the way businesses and marketers communicate and engage with consumers. With these changes, artificial intelligence (AI) has gained advancement and emerged as a powerful tool that is restructuring traditional marketing and promotional activities. AI-driven promotional media provide marketers with tools and strategies to analyze vast amounts of consumer data, predict consumer preferences, and help in delivering personalized promotional messages in real time. Artificial Intelligence (AI) has emerged as the fastest field in achieving advancement and progress and has transformed our digital society, impacting daily human life, including media and communication.

AI-driven promotional media consider a wide range of applications, such as personalized digital advertisements, recommendation systems, chatbots, virtual assistants, and AI-generated content are widely used across social media platforms, including e-commerce websites, and mobile applications. Consumer purchase intention refers to an individual's likelihood or willingness to buy a certain product or service and is one of the major factors considered while evaluating actual buying behavior. Previous studies suggest that factors such as personalization, trust, perceived value of a product/service, and credibility play a significant role in influencing purchase intention. Despite the progressive growth and embracement of AI by marketers in promotional activities, empirical studies examining its effectiveness from a consumer perspective remain limited, particularly in emerging markets. This study aims to address this gap by examining the effectiveness of AI-driven promotional media on consumer purchase intention, thereby contributing to the existing body of knowledge and offering efficient direction and practical take for marketers in this new digital marketing era.

2. OBJECTIVES:

1. To study the effectiveness of Artificial-intelligence driven promotional media on consumer purchase intention.
2. To analyze consumer exposure to AI-driven promotional media.
3. To examine consumer perception and trust towards AI-driven promotional advertisements.

3. REVIEW OF LITERATURE

Krishna & Prathapkumar (2023) stated that Artificial Intelligence (AI) has a revolutionary effect on personalized marketing. Further, it highlights the effects of AI-driven personalization on consumer engagement, purchase behaviour, and brand loyalty. Research insights shed light on how AI-powered chatbots, virtual assistants, and conversational interfaces have redefined customer interaction and delivered personalized responses. It showed the interplay between AI technologies and personalized marketing, offering insights into the future direction of consumer-centric strategies.

Anandvardhan & Jaiswal (2022) stated that AI-based promotional tools have emerged as a robust marketing technique for targeting audiences effectively. With consumers' growing awareness of AI, its effect on consumers has also risen. Display, video, and personalized advertisements are visually appealing promotional tools that capture consumer attention and make them aware of the product. However, some consumers still hesitate to purchase expensive products online. Consumer buying behaviour consists of the study of how individuals, groups, or organizations choose, obtain, consume, and dispose of products, services, experiences, or ideas to meet their needs. It examines consumers' emotional, mental, and behavioural responses, affected by numerous factors such as cultural, social, personal, and psychological.

Satapathy & Nanda (2023) revealed that the combination of Artificial Intelligence into marketing strategies has significantly improved efficiency across various stages of the marketing lifecycle. Data analysis, predictive analytics, personalized customer interactions and real-time insights, AI has become a game-changing source for marketers. Enabling automated ordinary tasks, offering valuable insights, and providing tailored customer experiences, AI continues to progress. With its ever-changing capabilities, AI is set to remain a keystone of innovation in digital marketing. Its competency to deliver highly targeted content, forecast customer behaviour, and quick adaptation to dynamic marketing scenarios makes AI an irreplaceable tool in modern marketing.

4. RESEARCH GAP

The notable research gap is empirical studies examining its effectiveness from a consumer perspective and as it remains limited, particularly in emerging markets. This study aims to address this gap by examining the effectiveness of AI-driven promotional media on consumer purchase intention, thereby contributing to the existing body of knowledge and offering an efficient and practical take for marketers in this evolving digital marketing era.

5. RESEARCH METHODOLOGY

The nature of the study is descriptive, and the main goal is to analyze the impact of AI-driven promotional media on consumer purchase intention. The study is based on both primary and secondary sources of data to ensure comprehensive analysis backed by the theoretical background of the research problem. Primary data were collected using a structured questionnaire. The questionnaire covered areas such as consumer exposure, perception, trust, and purchase intention towards AI-driven promotional media. The questionnaire sample consisted of 123 respondents and were measured using a five-point Likert scale. Convenience sampling method was selected for data collection from consumers who were exposed to digital advertisements. Secondary data was collected from research papers, academic journals, research articles, and online publications related to artificial intelligence, digital advertising, and consumer behaviour. The sample size consisted of adequate respondents to ensure meaningful analysis. The collected data were analyzed using simple statistical tools such as percentage analysis and descriptive statistics to interpret consumer responses. The findings of the study are based on the analysis of the collected data and are used to draw conclusions and meaningful findings regarding the impact of AI-driven promotional media on consumer purchase intention.

6. DATA FINDINGS AND INTERPRETATION

The data collected consisting of 123 respondents through the structured questionnaire were analyzed using percentage analysis and are presented using pie diagrams and tables for visual representation. The age-wise classification of respondents is presented in Table-1.

Table 1: Age Group

Age Group	Percentage (%)
Below 20	59.3%
20 – 30	33.3
30 – 40	4.9
Above 40	2.4

Sources: Based on primary survey

The analysis shows the different age group of consumers, and most of respondents, 59.3%, are below 20 years of age followed by 33.3% of age group between 20 – 30 indicating that majority of respondents are below 30. Consumers between the ages of 30-40 has 4.9%, where only 2.4% are above age of 40 years. The study enquired about the frequency of online shopping by the respondents. The results are summarized in Table 2.

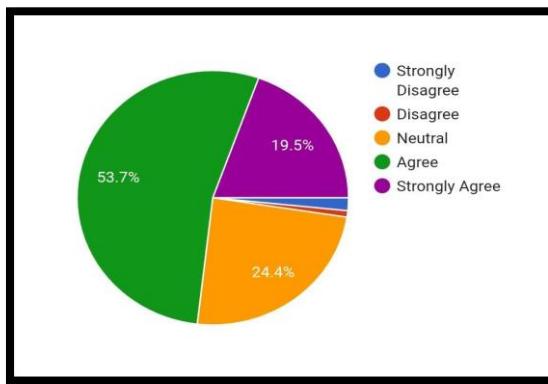
Table 2: Frequency of online shopping

Frequency	Percentage (%)
Frequently	60.2%
Occasionally	22%
Rarely	17.9%

Source: based on primary source

The interpretation shows the frequency of online shopping by the consumers, and a total 60.2% of respondents do online shopping frequently. Occasionally online shopping is carried out by 22% of the respondents and lastly 17.9% of respondents do online shopping rarely. It can be interpreted that respondents are majorly using online shopping. To assess respondents' exposure to AI-driven advertisements, they were asked how frequently they come across the same. The results are exhibited in Figure 1.

Figure 1: Frequency of respondents' exposure to AI-Created Advertisements

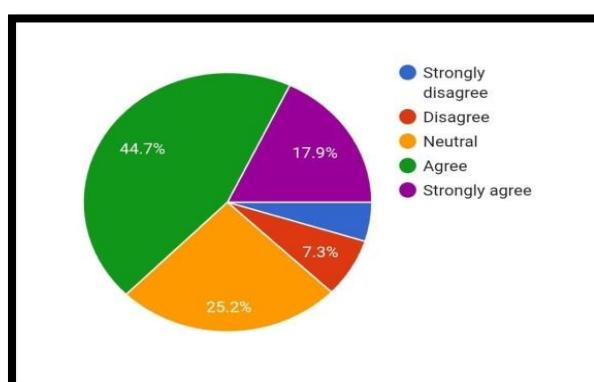


Source: Based on primary source

The results indicate a strong positive response toward AI-driven personalized advertising, with over half of the respondents agreeing on how frequently they come across advertisements created using AI. This suggests that AI-based advertisements on digital platforms are generating positive responses and engagement. Around 53.7% of the respondents agree with the stated statement. While 24.4% of respondents are neutral about this and 19.5% of the respondents strongly agree with the statement. The study reveals that a majority of respondents are frequently exposed to AI-driven promotional media on digital platforms, indicating the rapid progress and growing presence of AI in advertising.

Following the assessment of respondents' perceptions regarding the frequency of AI advertisement exposure, the subsequent question examined whether the AI- driven advertisements matched consumer interests and preferences. The results are exhibited in Figure 2.

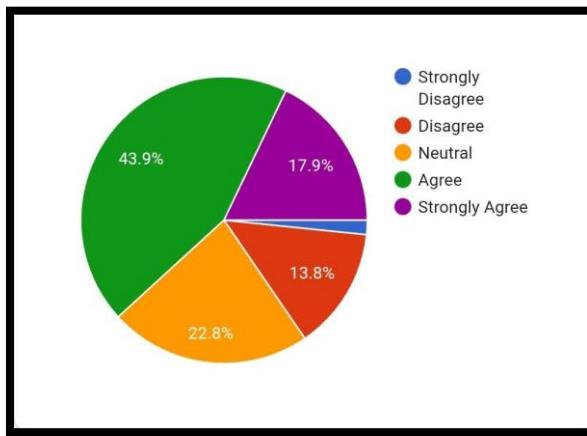
Figure 2: Respondents' perception of AI-driven Advertisements



Source: Based on primary source

The findings reveal that a majority of respondents agree that the AI-generated advertisement matches their interest and preferences for related content. Specifically, 44.7% of the respondents agreed, 17.9% strongly agreed and 25.2% stayed neutral, that AI-driven advertisements align better with their interests and preferences. In contrast, 7.1% of the respondents disagreed with this statement, and 5.1% strongly disagreed. This reflects the efficiency of AI in promotional media and meeting consumer needs. Following the examination of consumer interests and preferences, was asked to examine if AI-driven advertisements increase the likelihood of purchasing the advertised product. The responses are presented in Figure 3.

Figure 3: Purchase Intention Influenced by AI-generated Advertisements

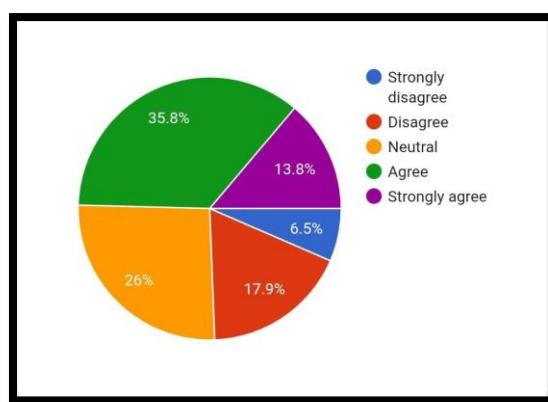


Source: Based on primary source

The data indicates an overall positive response to AI-driven advertisements-a majority of respondents agree (43.9%) that the advertisement increases the likelihood of the product, while 17.9% strongly agree, reinforcing this favorable view. Meanwhile, 22.8% remain neutral, suggesting a significant portion of respondents are undecided or indifferent. Only a small minority fall into disagreement with 13.8% and strongly disagree with 1.6% categories, showing limited negative sentiment compared to the predominantly positive and neutral responses. A significant number of respondents agreed that AI-driven advertisements provide clear and useful product information, which helps consumers understand products better.

Following the examination, the subsequent question assessed was whether AI-driven advertisement influences consumer's future buying decisions. The responses are presented in Figure 4.

Figure 4: Respondents' future buying decisions influenced by AI-generated Advertisements.

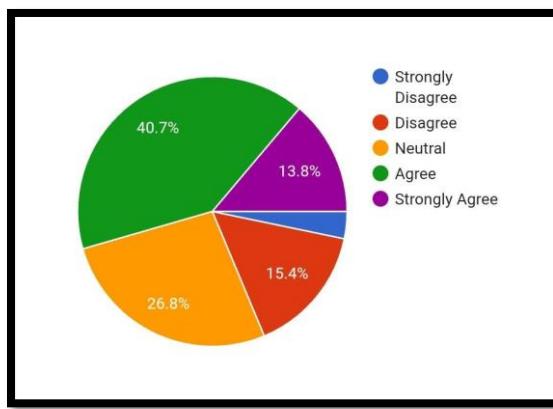


Source: Based on primary source

The interpretation of the results shows a positive response toward AI-driven advertising, with 35.8% of the respondents agreeing on buying decisions influenced by advertisements created using AI. This suggests that AI-based advertisements on digital platforms are generating positive responses and engagement. Around 26% of the respondents are neutral, reflecting that there is still a requirement in influence consumer buying decisions. Lastly, 17.9% disagreed with the stated statement. While 6.5% of respondents strongly disagreed, highlighting the dynamic nature of consumer behavior, The results show a positive perception and trust among consumers towards AI-driven promotional advertisements. The study also found that consumers are willing to try brands that use AI-based promotional media, reflecting acceptance of AI in marketing practices.

The study further assessed whether consumers would recommend AI-driven advertisement promoted products to others. The responses are presented through a pie diagram in Figure 5.

Figure 5: Respondents' likelihood to recommend products promoted through AI-generated Advertisements.



Source: Based on primary source

The interpretation from the results shows favorable effect on AI-driven promotion, with 40.7% of the respondents agreeing and 13.8% strongly agreeing in favour of recommending the products promoted through advertisements created using AI. This suggests that AI-based promotional media significantly impacts the sales. Around 26.8% of the respondents are neutral, indicating improvement for better consumer retention. While 15.4 and 3.3% of respondents strongly disagreed, highlighting the dynamic nature of consumer behaviour. Responses suggest that AI-driven advertisements influence future buying behaviour of consumers. Many consumers are likely to recommend products promoted through AI-driven advertisements to others.

Overall, the findings confirm that AI-driven promotional media have a positive and significant impact on consumer purchase intention and buying behaviour.

CONCLUSION

The study explored how effective AI-driven promotional media are for consumer purchase intention and further analyzed how these perceptions are transformed into actual purchase sentiment and willingness. The study concludes that AI-generated advertisements, overall promotional media, have a significant and effective influence on consumer perception, engagement and purchase intention when they are perceived as relevant to their individual interests. A vast no. of respondents acknowledged higher relevance and increased likelihood of engagement in favour of advertisements generated with the help of AI. However, the findings of the study also reveal notable concerns and improvement areas regarding consumer trust and awareness towards AI-generated ads and promotional content which needs attention. Overall, the effectiveness and acceptance of AI-generated promotional media lies in advertising strategies adopted by marketers to achieve a balance between personalization and relevance of promotional content to create efficiency and positive impact on consumers' emotions and perceptions, thus effectively promoting consumers' purchasing behaviours.

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