Original Article
ISSN (Online): 2582-7472

ShodhKosh: Journal of Visual and Performing Arts
June 2024 5(6),2049–2061

A ROLE OF ARTIFICIAL INTELLIGENCE ON MARKETING MIX AND CONSUMER BEHAVIOR

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DOI
10.29121/shodhkosh.v5.i6.2024.5233

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

The present study examines the impact of Artificial Intelligence (AI) in the marketing mix on consumer behavior in Pune City. It establishes relationship between AI and the marketing mix which tries to impact on Consumer behavior. It also explores how AI-enabled strategies can shape consumer behavior and drive marketing objectives accomplishment. AI technology has gained popularity in various industries and each and every domain. It helps in marketing, due to its potential to enhance customer experiences, personalize marketing messages, which leads to improve predictability. This research deals with the role of Artificial Intelligence in overall Marketing Mix and Consumer Behaviour.

Keywords: Artificial Intelligence (AI), Marketing Mix, Consumer Behaviour

1. INTRODUCTION

Artificial intelligence (AI) technologies have led to a significant change in how businesses operate and connect with their customers in recent years. Due to its potential, AI technology has become popular in various industries, including marketing It enhances customer experiences, personalizes marketing messages, and improves consumer behavior prediction. Artificial intelligence (AI) has the ability to process and analyze vast amounts of data. Marketers have gained powerful tools to understand their target audience, personalize marketing efforts, and optimize marketing campaigns. Businesses' understanding and influence of consumers Behavior have been revolutionized by the integration of Artificial Intelligence (AI) into the marketing mix. Analysis of the current state of AI implementation in marketing, evaluation of its effectiveness, and assessment of potential benefits and risks are the objectives of the study

1.1. MARKETING MIX

The marketing mix refers to the strategic combination and management of four essential elements - product, price, place, and promotion. Company uses these effectively reach its target audience. It promotes its offerings, and drive sales in the market. A comprehensive marketing strategy that maximizes value is created by combining the components of Product, Price, Place, and Promotion.

1.2. ARTIFICIAL INTELLIGENCE (AI)

Artificial intelligence (AI) is a collection of technologies that empower computers to carry out complex tasks such as understanding language, analyzing data, and providing recommendations. It involves creating intelligent machines that possess human-like reasoning, learning, and decision-making abilities, as well as the capability to process enormous amounts of data that surpass human capacity.

1.3. ARTIFICIAL INTELLIGENCE (AI) IN THE MARKETING MIX

AI can improve the conventional marketing mix by adding automation and intelligence to the four Ps: promotion, place, price, and product.

1) Artificial Intelligence (AI) in the product mix:

AI helps in collecting market data, analyzing customer feedback, and spotting trends and patterns, AI can help with product development and enhancement. Businesses can better customize their products to match particular needs by using the insights it can offer about consumer preferences.

2) Artificial Intelligence (AI) in the price mix:

AI helps in examining market conditions, rivals' prices, consumer behavior, and other pertinent variables, AI can assist in optimizing pricing strategies. Businesses can increase revenue and profitability by using machine learning algorithms that can dynamically modify prices in real-time based on supply, demand, and other factors.

3) Artificial Intelligence (AI) in the place mix:

AI helps in streamlining supply chain management, inventory forecasting, and order fulfillment procedures, AI can improve the distribution and logistics components of marketing. Businesses can increase productivity, cut expenses, and guarantee on-time customer delivery by utilizing AI.

4) Artificial Intelligence (AI) in the promotion mix:

By utilizing machine learning, natural language processing, and data analytics, AI has the potential to completely transform marketing and advertising campaigns. It can better target particular audience segments and personalize marketing messages by analyzing customer behavior, preferences, and demographics. By adding intelligence and automation to each of the four Ps—Product, Price, Place, and Promotion—AI has the potential to improve the conventional marketing mix.

5) Artificial Intelligence (AI) in the product mix:

By examining consumer feedback, performing market research, and spotting patterns and trends, AI can help with product development and enhancement. It can reveal consumer preferences, enabling companies to customize their goods to fit particular needs.

1.4. CONSUMER BEHAVIOR

Consumer behavior refers to the study of individuals, groups, or organizations and the processes they undertake when selecting, purchasing, using, or disposing of products, services, ideas, or experiences to satisfy their needs and desires. It involves understanding the various factors that influence consumer decision-making, including psychological, social, cultural, and economic aspects.

2. REVIEW OF LITERATURE

Djermani, F., & Hajimia, H. (2021) examined Artificial intelligence effect on marketing mix. AI and big data to fight against the COVID-19 pandemic and review state-of-the-art solutions using these technologies. Thus, this study aimed to examine the effects of marketing mix dimensions (product, price, promotion, and place) to predict consumer behaviour, emotions and trend using AI for health care. This study will use mix method. First the qualitative research method which involved semi-structured interviews with different marketing professional belonging from different firms of Malaysia. A sample size of 10 is selected and the researcher interviewed 10 marketing professionals A quantitative approach whereby 300 questionnaires are distributed to different marketing professional from various firms in Malaysia. The analysis method used the Partial Least Square smart PLS descriptive methods. As Malaysian consumers exhibit serious concern towards to predict consumer behavior drives consumer resistance to healthcare, it is recommended that the managers focus their strategies on marketing strategies significance on to predict consumer behavior. The study discusses the implications to various stakeholders, its limitation, and recommendations for future studies.

Piyush Jain, Keshav Aggarwal (2020) explored the usage of Artificial Intelligence (AI) in Marketing improves the customer experience by using technology optimally .Grasping customer needs and expectations is vital for companies nowadays. Artificial Intelligence (AI) helps marketers process large quantities of data, personalize sales, and fulfill customer expectations swiftly.

Nanayak kara, N. W. O. K. D. S. P. (2020) have evaluated AI interface as a trend in diverse fields, including marketing. To gain a competitive advantage over their rivals, companies are now redefining their marketing mix to include AI, which utilizes extensive data to make informed decisions about upcoming business processes, consumer behavior, and market trends.

Jain, S., & Gandhi, A. V. (2021) have focused aims on artificial intelligence on impulse buying behaviour of Indian shoppers in fashion retail outlets. This paper aims to understand the impact of modern technologies such as artificial intelligence on impulse buying behaviour of Indian shoppers specifically in fashion retail outlets. The empirical study on the effect of artificial intelligence on impulse purchase decisions was conducted through an e-survey of the Indian shoppers. The data collected was analysed using factor analysis and multiple regression analysis. The impact of modern technologies which are used by the retailers to enhance sale and consumer engagement was studied. The relationship between use of artificial intelligence parameters such as the purchase duration, recommended products, product information and human interaction and its impact on Impulse Purchase was studied and the results revealed that all these factors except product information had a significant impact on the impulse purchase decision of the buyer.

Fazla Rabby, Dr. Ranga Chimhundu, Dr. Rumman Hassan (2021) examine the marketing environment is evolving, presenting larger challenges in tracking the customer journey. With the expansion of the digital market, customers possess an abundance of shopping options at their disposal. They express their desires, attitudes, and beliefs through various channels, emphasizing the importance of delivering exceptional customer experiences across digital platforms. AI plays a crucial role in enhancing the digital experience by delivering personalized content.

Mrs. Jamuna K M (2022) study AI makes smart devices and apps provide customized experiences using information about how people behave, what they want, and what they prefer. This assists companies in coming up with novel and creative methods to advertise and sell products by understanding their customers, competitors, and the market. AI also simplifies tasks by doing tasks automatically, saving money, and making work processes better.

2.1. OBJECTIVES

1) To study the awareness and usage of Artificial Intelligence (AI) in marketing mix- product, price, place and promotion.
2) To ascertain the role of AI in enhancing advertising campaigns, improving customer engagement, and optimizing pricing strategies.
3) To study the effectiveness of advertisement with the application of Artificial Intelligence (AI) in the domain of marketing mix.
4) To examine the impact of Artificial Intelligence (AI) in marketing mix.

2.2. SCOPE OF THE STUDY

The scope of this study focuses on the role of Artificial Intelligence (AI) in shaping the marketing mix and its impact on consumer behavior, specifically within the context of Pune city. With AI revolutionizing various aspects of marketing such as product recommendations, personalized advertising, predictive analytics, and customer engagement this research aims to explore how businesses in Pune integrate AI-driven strategies into their marketing mix to enhance consumer experiences and influence purchasing decisions. The study will examine how AI contributes to product customization, dynamic pricing, targeted promotions, and efficient distribution, ultimately affecting consumer preferences, buying patterns, and brand loyalty. By analyzing AI's application in the local market landscape, this research seeks to identify emerging trends, benefits, challenges, and the overall effectiveness of AI-powered marketing strategies in influencing consumer behavior in Pune.

3. RESEARCH METHODOLOGY

3.1. RESEARCH DESIGN

The research adopts a descriptive research design, which is appropriate for systematically analyzing and describing the impact of Artificial Intelligence in the marketing mix on consumer behavior. A descriptive approach enables the researcher to gather detailed insights and observations regarding the current trends, patterns, and consumer responses to AI-driven marketing strategies. This design facilitates a structured exploration of the subject, providing a comprehensive understanding of the relationship between AI and consumer behavior without manipulating variables.

3.2. SAMPLING TECHNIQUE

For this study, convenience sampling has been employed as the sampling technique. Convenience sampling is a non-probability sampling method in which participants are selected based on their easy accessibility and willingness to participate. This approach is beneficial in obtaining data efficiently within a specific time frame. A total sample size of 200 respondents has been chosen for the study, ensuring that diverse consumer perspectives from various backgrounds and demographics within Pune city are captured to derive meaningful insights.

3.3. AREA OF THE STUDY

The research is confined to Pune city, Maharashtra, India. Pune, known for its vibrant economic landscape, growing technological advancements, and dynamic consumer market, serves as an ideal location to analyse AI’s influence on marketing strategies and consumer behaviour. The study aims to assess local consumer responses, industry adoption of AI tools, and emerging trends within Pune’s commercial environment.

3.4. METHODS OF DATA COLLECTION

The study incorporates both primary and secondary sources of data collection to ensure a comprehensive analysis of the subject matter. Primary data is collected through a structured questionnaire, designed to capture direct responses from the selected participants. These responses provide first-hand insights into consumer behaviour, perceptions, and interactions with AI-driven marketing strategies. Additionally, secondary data is obtained through an extensive review of existing literature, research papers, industry reports, and relevant publications. This secondary information helps in establishing a strong theoretical foundation, offering context and background for the primary data findings, and aiding in a more profound understanding of AI's role in marketing.

3.5. QUESTIONNAIRE DESIGN

A structured questionnaire serves as the primary tool for data collection. It consists of well-formulated questions aimed at gathering precise and relevant information from respondents. The questionnaire is designed to ensure clarity, ease of response, and alignment with research objectives. It includes both closed-ended and open-ended questions,

allowing quantitative analysis while also capturing qualitative insights. This structure enables the researcher to systematically evaluate consumer perspectives on AI-driven marketing tactics, preferences, and behavioural responses.

3.6. SCALING TECHNIQUE

To measure responses effectively, a Likert scale is employed within the questionnaire design. The Likert scale is a widely used psychometric tool that helps assess the degree of agreement or disagreement with specific statements related to AI in marketing and consumer behaviour. This approach allows for quantification of attitudes, perceptions, and preferences in a structured manner, facilitating comparative analysis and trend identification based on consumer responses.

3.7. STATISTICAL TOOLS

Various statistical tools are applied to analyse the collected data. These include percentage analysis, which helps in understanding the distribution and frequency of responses, and chi-square analysis, which is utilized to determine the relationship between different variables, such as AI-driven marketing strategies and consumer behaviour. The application of these tools ensures that the study derives meaningful insights, identifies patterns, and validates hypotheses, contributing to a more accurate and data-driven conclusion.

4. DATA ANALYSIS AND INTERPRETATION

Researcher study Demographic study Firstly 1 to 7 questions. Demographic study of respondents Gender, age, education, occupation, Income level, marital status, Location has been given

Table 1 Gender wise Respondents:

S. No	Particulars	No. of. Respondents	Percentage
1	Male	160	80
2	Female	40	20
	Total	200	100

The table shows the gender distribution of the respondents in the survey. This indicates that males form a significantly larger proportion of the respondents compared to females. The gender imbalance suggests that the findings of the survey may be more reflective of male perspectives

Table 2 Age wise Respondents:

S.No.	Factors	No. of Respondents	Percentage
1	Below 21years	55	27.5
2	21-30 years	120	60
3	31-40 years	5	2.5
4	41-50 years	20	10
	Total	200	100

The table illustrates the age-wise distribution of respondents in the survey, highlighting a predominantly young adult demographic. The data reveals that 60% of respondents (120 individuals) belong to the 21–30 years age group, making it the most represented category. Additionally, 27.5% (55 respondents) are below 21 years, indicating a significant proportion of younger participants.

This distribution suggests that the survey results may be strongly influenced by the preferences, behaviors, and perspectives of individuals in the 21–30 years age group, shaping key insights toward youth-driven trends. The limited presence of older age groups further emphasizes the youth-centric nature of the respondent base, potentially reflecting the dominance of younger consumers in the context of the study.

Table 3 Qualification wise Respondents:

S. No	Factors	No. of Respondents	Percentage
1	HSC and below	10	5

2	Diploma	12	6
3	Under-graduate	98	49
4	Post-graduate	80	40
	Total	200	100

The table presents the educational qualification of respondents. This indicates that a large portion of respondents are highly educated, with nearly 89% having undergraduate or postgraduate qualifications. This education profile suggests the survey findings are likely influenced by individuals with a relatively high academic background, which may reflect more informed or specialized viewpoints

Table 4 Occupation wise classification of Respondents:

S. No	Factors	No. of Respondents	Percentage
1	Student	125	62.5
2	Government-Employee	15	7.5
3	Private-Employee	36	18
4	Self-Employed	24	12
	Total	200	100

The table displays the occupational status of the respondents. A significant majority, 62.5% (125 respondents), are students, indicating that the sample is primarily composed of individuals who are currently pursuing education. 18% (36 respondents) are private employees, representing the second-largest group.

This distribution reveals that the respondent base is largely academic, with a limited but diverse presence of working professionals from both public and private sectors. The high proportion of students suggests that the data may reflect youthful and possibly career-oriented perspectives, which could influence the overall interpretation of the survey results.

Table 5 Monthly income wise Respondents:

S. No	Factors	No. of Respondents	Percentage
1	Below 10K	135	67.5
2	10K-20K	24	12
3	20K-30K	16	8
4	Above 30 K	25	12.5
	Total	200	100

The table presents the monthly income distribution of the respondents. This distribution indicates that the largest segment of respondents belongs to the low-income group, likely influenced by the high number of students identified in previous data. The data suggests a predominantly economically dependent or early-career population, which may impact their financial decision-making behaviors and consumption patterns.

Table 6 Marital status wise classification of Respondents:

S. No	Factors	No. of Respondents	Percentage
1	Married	22	11
2	Unmarried	178	89
	Total	200	100

Table presents the marital status of the respondents out of 200 individuals. This significant difference indicates that the respondent base is predominantly young and unmarried, which is consistent with the earlier data showing high percentages of students and individuals in the 21–30 age group. As a result, the survey results are likely to reflect the views, preferences, and priorities of a younger, single demographic.

Table 7 Living area wise classification of Respondents:

S. No	Factors	No. of Respondents	Percentage
1	Urban	94	47

2	Semi-Urban	51	25.5
3	Rural	35	17.5
4	Semi-Rural	20	10
	Total	200	100

From the above table show that 47 %of the respondents are from Urban, 25.5% of the respondents are from Semi-urban and 17.5% of the respondents are from Rural, 10% of the respondents are from Semi-rural.

Table 8 Respondent's familiarity with the concept of (AI) in marketing:

S.No	Factors	No. of Respondents	Percentage
1	Very Familiar	28	14
2	Familiar	64	32
3	Some What Familiar	41	20.5
4	Slightly Familiar	32	16
5	Not At All Familiar	35	17.5
	Total	200	100

The table illustrates the level of familiarity of respondents with a particular subject This distribution shows that while a majority (66.5%) have at least some level of familiarity, only a small portion have a strong understanding (very familiar). On the other hand, a significant 33.5% have low or no familiarity ("Slightly" or "Not at all familiar"), which could be crucial when planning educational or awareness-related initiatives on the topic

Table 9 Respondent's opinion on whether they used of any Artificial Intelligence (AI) powered marketing tools or platforms:

S. No	Factors	No. of Respondents	Percentage
1	Yes	52	26
2	No	95	47.5
3	Maybe	53	26.5
	Total	200	100

This distribution reveals a generally negative or uncertain attitude, with only a quarter of the respondents expressing a clear affirmative stance. The high percentage of "No" and "Maybe" (74%) may point to a need for more information, reassurance, or awareness regarding AI.

the issue being evaluated Table No-10 Respondent's familiarity with the concept of Artificial Intelligence (AI) in the marketing mix:

S. No	Factors	No. of Respondents	Percentage
1	Very Familiar	31	15.5
2	Familiar	55	27.5
3	Some What Familiar	52	26
4	Slightly Familiar	38	19
5	Not At All Familiar	24	12
	Total	200	100

The table illustrates the level of familiarity of respondents with a particular AI and Marketing Mix. This distribution shows that while a majority (69.0%) have at least some level of familiarity, only a small portion have a strong understanding (very familiar). On the other hand, a significant 31% have low or no familiarity ("Slightly" or "Not at all familiar"), which could be crucial when planning educational or awareness-related initiatives on the topic

Table 11 Respondent's opinion on which area Artificial Intelligence (AI) in the marketing and its effectiveness:

S. No	Factors	No. of Respondents	Percentage
1	Product	46	23
2	Price	33	16.5
3	Place	18	9
4	Promotion	29	14.5
5	All of the above	74	37
	Total	200	100

The table illustrates the level of Artificial Intelligence (AI) in the marketing and its effectiveness. This distribution shows that AI impacts on marketing Mix. 37% respondents agree that AI effects Product mix. While each elements of Marketing mix effect on -23%, 16.5%,9% 14.5% on product, price, place , promotion respectively.

Table 12 Respondent's opinion on whether AI-powered product recommendations are useful:

S. No	Factors	No. of Respondents	Percentage
1	Strongly Disagree	20	6.4
2	Disagree	22	10.5
3	Neutral	75	43.9
4	Agree	49	27.5
5	Strongly Agree	34	11.7
	Total	200	100

The table presents respondents' opinions on the usefulness of AI-powered product recommendations. The data indicates that 43.9% of respondents have an undefined stance, meaning they are uncertain about whether AI-driven recommendations are beneficial. Meanwhile, approximately 39% of respondents find AI-powered product recommendations useful, suggesting a significant portion acknowledges their advantages. Additionally, 17% of respondents disagree with the usefulness of AI-powered recommendations, indicating skepticism or dissatisfaction with their effectiveness. The findings also highlight the need for awareness-related initiatives to improve understanding and acceptance of AI-driven recommendations among consumers.

Table 13 Respondent's opinion on whether they used any AI-powered pricing tools in your business:

S. No	Factors	No. of Respondents	Percentage
1	Yes	62	31
2	No	73	36.5
3	Maybe	65	32.5
	Total	200	100

The table presents respondents' opinions regarding the usage of AI-powered pricing tools in their business operations. The data indicates the extent to which businesses have integrated AI-driven pricing strategies, reflecting varying levels of adoption and awareness among respondents. The findings offer insights into the role of AI in pricing decisions, highlighting both its perceived advantages and potential areas for improvement in business applications.

Table 14 Respondent's opinion on whether AI-powered targeted advertising is relevant to your interests and needs:

S. No	Factors	No. of Respondents	Percentage
1	Strongly Disagree	18	9
2	Disagree	26	13
3	Neutral	71	35.5
4	Agree	65	32.5
5	Strongly Agree	20	10
	Total	200	100

The table presents respondents' opinions, revealing a diverse range of perspectives. The data indicates that 35.5% of respondents hold a neutral stance, suggesting uncertainty or ambivalence regarding the subject. Meanwhile, 32.5% of respondents agree, demonstrating a positive inclination. Additionally, 10% of respondents strongly agree, reinforcing the affirmative viewpoint. Conversely, 13% of respondents disagree, expressing skepticism, while 9% strongly disagree, highlighting a stronger opposition to the topic. These findings showcase varying degrees of acceptance and hesitation among respondents.

Table 15 Respondent's opinion on whether AI can help you optimize your location strategy, including identifying new store or warehouse locations and closing underperforming ones:

S. No	Factors	No. of Respondents	Percentage
1	Not At All	20	10.5
2	Slightly	35	18.7
3	Moderately	71	38
4	Very Much	49	22.8

5	Completely	25	9.9
	Total	200	100

The table illustrates the distribution of respondents' opinions, revealing varying degrees of agreement. The data indicates that 38% of respondents consider the subject moderately influential, reflecting a balanced perspective. Meanwhile, 22.8% of respondents believe it impacts them very much, highlighting strong agreement. Additionally, 18.7% of respondents view it as slightly impactful, suggesting a lower level of influence. On the other hand, 10.5% of respondents feel it is not at all relevant, showing complete disagreement, while 9.9% of respondents consider it completely impactful, expressing total affirmation. These findings showcase diverse viewpoints on the subject.

Table 16 Respondent's rating on the effectiveness of chat-bots in providing customer support:

S. No	Factors	No. of Respondents	Percentage
1	Very Effective	31	15.5
2	Effective	82	41
3	Some What Effective	45	22.5
4	Slightly Effective	30	15
5	Not At All Effective	12	6
	Total	200	100

The table presents respondents' opinions on the effectiveness of chatbots in providing customer support. The data reveals that 41% of respondents consider chatbots effective, indicating a significant reliance on AI-driven customer service. Additionally, 15.5% of respondents find chatbots very effective, further emphasizing their positive impact. Meanwhile, 22.5% of respondents believe chatbots are somewhat effective, suggesting that while they offer assistance, there may be areas for improvement. 15% of respondents rate chatbots as slightly effective, reflecting limited usefulness in certain cases. On the other hand, 6% of respondents feel that chatbots are not at all effective, signaling dissatisfaction with chatbot-based support services. These findings highlight varying levels of acceptance and effectiveness of AI-powered customer service tools.

Table 17 Respondent's familiarity with the use of AI in marketing mix to influence consumer behavior:

S. No	Factors	No. of Respondents	Percentage
1	Very Familiar	23	11.5
2	Familiar	75	37.5
3	Some What Familiar	55	27.5
4	Slightly Familiar	36	18
5	Not At All Familiar	11	5.5
	Total	200	100

From the above table, shows that 27.5 % of the respondents are somewhat familiar with the use of AI in The table presents respondents' familiarity with the use of AI in the marketing mix to influence consumer behavior. The data reveals that 37.5% of respondents are familiar with AI's role in marketing, indicating a significant level of awareness. Additionally, 11.5% of respondents are very familiar, demonstrating a deep understanding of its applications. Meanwhile, 27.5% of respondents are somewhat familiar, suggesting moderate exposure to AI-driven marketing strategies. 18% of respondents are slightly familiar, reflecting limited knowledge on the topic, while 5.5% of respondents are not familiar at all, highlighting a lack of awareness regarding AI's impact in marketing. These findings showcase varying levels of familiarity among respondents and emphasize the need for further education and awareness on AI-driven marketing approaches.

4.1. HYPOTHESIS TESTING

HYPOTHESIS 1:

Null Hypothesis H0: There is no significant relation between Gender opinions about importance Artificial Intelligence (AI) is to the marketing industry.

Alternative Hypothesis H1: There is a significant relation between Gender opinions about importance Artificial Intelligence (AI) is to the marketing industry.

Table 18 Gender opinions about importance Artificial Intelligence (AI) is to the marketing industry.

Chi-Square Test	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	4.376a	4	0.39
Likelihood Ratio	5.059	4	0.284
Linear-by-Linear Association	0.378	1	0.542
N of Valid Cases	200		

When Significance value (.390) is greater than alpha value (0.05), therefore H0 is accepted, H1 is rejected. This shows that there is no significant association between Gender and opinions about importance Artificial Intelligence (AI) is to the marketing industry.

HYPOTHESIS 2:

Null Hypothesis H0: There is no significant relation between Age and familiarities with the concept of Artificial intelligence (AI) in marketing.

Alternative Hypothesis H1: There is a significant relation between Age and familiarities with the concept of Artificial intelligence (AI) in marketing.

Table 19 Age Familiarity with the concept of Artificial intelligence (AI) in marketing

Chi-Square Tests	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	23.839a	12	0.022
Likelihood Ratio	24.192	12	0.02
Linear-by-Linear Association	7.413	1	0.008
N of Valid Cases	200		

When Significance value (.022) is lesser than alpha value (0.05), therefore H0 is rejected, H1 is accepted. This shows that there is a significant association between Age and familiarities with the concept of Artificial intelligence (AI) in marketing.

HYPOTHESIS 3:

Null Hypothesis H0: There is no significant relation between Educational Qualification and opinion on usage on any Artificial Intelligence (AI) powered marketing tools or platforms.

Alternative Hypothesis H1: There is significant relation between association between Educational Qualification and opinion on any Artificial Intelligence (AI) powered marketing tools or platforms.

Table 20 Educational Qualification: Did you ever use any Artificial Intelligence (AI) powered marketing tools or platforms:

Chi-Square Tests	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	5.006a	6	0.543
Likelihood Ratio	5.75	6	0.452
Linear-by-Linear Association	0.002	1	0.964
N of Valid Cases	200		

When the Significance value (.543) is greater than alpha value (0.05), therefore H0 is accepted, H1 is rejected. This shows that there no significant association between Educational Qualification and opinion on any Artificial Intelligence (AI) powered marketing tools or platforms.

HYPOTHESIS 4:

Null Hypothesis H0: There is no significant relation between monthly income and opinion on usage of any Artificial Intelligence (AI) powered marketing tools or platforms.

Alternative Hypothesis H1: There is significant relation between monthly income and opinion on usage of any Artificial Intelligence (AI) powered marketing tools or platforms.

Table 21 Monthly income: How has an AI-based pricing solution affected your business?

Chi-Square Tests	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	14.509a	20	0.807
Likelihood Ratio	18.167	20	0.578
Linear-by-Linear Association	0.116	1	0.739
N of Valid Cases	200		

When the Significance value (.807) is Greater than alpha value (0.05), therefore H0 is accepted. H1 is rejected. This shows that there is no significant association monthly income and opinion on usage of any Artificial Intelligence (AI) powered marketing tools or platforms.

5. FINDINGS OF THE STUDY

The survey findings highlight various perspectives on AI's role in marketing and customer support. Regarding AI-powered targeted advertising, 35.5% of respondents remain neutral, while 32.5% agree and 10% strongly agree, indicating its relevance in addressing consumer needs. However, 13% disagree and 9% strongly disagree, reflecting skepticism. In terms of AI's impact on location strategy optimization, 38% find AI moderately useful, while 22.8% consider it highly effective, and 9.9% fully trust it. Conversely, 18.7% see AI as slightly helpful, and 10.5% view it as ineffective, showcasing mixed opinions. The effectiveness of chatbots in customer support also varies, with 41% finding them effective, 15.5% rating them as very effective, and 22.5% considering them somewhat useful, while 15% see them as slightly effective, and 6% believe they are not effective at all. Lastly, respondents' familiarity with AI in marketing shows 37.5% are familiar, 11.5% are very familiar, 27.5% are somewhat familiar, 18% are slightly familiar, and 5.5% have no familiarity, emphasizing the growing but varied understanding of AI's role in marketing. These insights reflect AI's increasing influence in business strategies while also indicating areas for improvement and further education.

6. FINDINGS OF HYPOTHESIS

The statistical analysis highlights various relationships between demographic factors and perspectives on Artificial Intelligence (AI) in marketing. When the significance value (0.390) is greater than the alpha value (0.05), the null hypothesis (H0) is accepted, and the alternative hypothesis (H1) is rejected. This suggests that gender does not significantly influence opinions on the importance of AI in the marketing industry. However, when the significance value (0.022) is lesser than the alpha value (0.05), H0 is rejected and H1 is accepted, indicating a significant relationship between age and familiarity with AI concepts in marketing. This implies that age plays a role in awareness and understanding of AI-driven marketing strategies. Additionally, the findings confirm a significant relationship between educational qualifications and opinions on AI-powered marketing tools or platforms, suggesting that individuals with different educational backgrounds may perceive AI's role in marketing differently. Finally, when the significance value (0.807) is greater than the alpha value (0.05), H0 is accepted and H1 is rejected, demonstrating that monthly income does not significantly affect opinions on the usage of AI-powered marketing tools or platforms. These results provide valuable insights into how demographic factors influence perceptions and acceptance of AI within the marketing industry.

7. SUGGESTIONS

1) It is recommended to focus on promoting gender diversity and inclusivity in AI-related fields. It should be encouraging equal opportunities and representation for all genders in AI research. It helps in development, and implementation comprehensive and unbiased approach to AI in marketing.
2) It is a significant relation between age and familiarity with the concept of AI in marketing, it is important to tailor educational initiatives to different age groups. It is suggested that age-specific training programs, organizing workshops, and creating informative content can help bridge the familiarity gap.

3) It is no significant relation between educational qualification and opinions on AI-powered marketing tools or platforms, it is crucial to ensure accessibility and user-friendliness of AI tools across different educational backgrounds. Providing comprehensive tutorials, simplified interfaces, and customer
4) It is no significant relation between monthly income and opinions on the usage of AI-powered marketing tools or platforms. It is recommended to focus on affordability and cost-effectiveness.

8. CONCLUSION

Researcher explored various facts and give suggestions on artificial intelligence in marketing mix on consumer behavior. The study highlights the significant impact of artificial intelligence (AI) on consumer behavior with respect to marketing mix. By using AI, businesses can create personalized experiences for customers. This helps strengthen brand loyalty and drive business growth.. AI also provides valuable insights into customers, competitors, and market trends, enabling companies to make informed decisions.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

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