"The effect of AI- enabled marketing on personalized customer experience using social media"

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ABSTRACT

The research presented here explores how AI-enabled marketing affects social media-based individualized customer experiences with a focus on young consumers who are students. In order to understand consumer preferences and habits, businesses can better target their social media marketing efforts. This study investigates how AI algorithms evaluate data through a mixed-methods approach that includes surveys and case studies. The results demonstrate that by helping companies gain a deeper understanding of their target market and adjust their marketing tactics accordingly, AI-powered marketing has the ability to greatly improve optimized consumer experiences. Increased customer pleasure, loyalty, and engagement follow from this. By facilitating more meaningful connections between marketers and customers on social media, AI is revolutionizing marketing strategies, and our research helps to better comprehend this trend. It also emphasizes how crucial it is to use AI technology wisely in order to boost customer loyalty and corporate productivity.

Keywords- Artificial intelligence, marketing strategy, consumer behavior, social media platforms, data analysis, personalized content, customer engagement, brand loyalty, and business performance.

CHAPTER-1

1.INTRODUCTION

Artificial intelligence (AI) has emerged as a disruptive force in marketing, revolutionising how firms interact with clients and personalise their experiences. This is especially noticeable in the context of social media, where AI algorithms can analyze massive amounts of data to understand consumer preferences and behavior, enabling firms to adapt their marketing efforts in ways that were never before possible. While there is a growing body of research on the impact of AI-enabled marketing on various aspects of business performance, such as brand awareness, customer satisfaction, and sales, there is a lack of comprehensive and holistic research that investigates its impact on personalized customer experiences via social media.

The purpose of this study is to address this gap by examining how AI-enabled marketing affects social media platforms' customized customer experiences. By delivering more relevant and current material, it aims to explain how AI-driven methods might improve consumer engagement, contentment, and loyalty. Along with examining these issues, the study will look into the benefits and problems that AI brings for companies wishing to use social media for tailored marketing, including concerns about customer trust, algorithm bias, and data protection. The study hopes to offer a thorough and nuanced view of how AI is changing the landscape of personalized marketing by using a mixed-methods approach and concentrating on well-known social media platforms like Facebook, Instagram, Twitter, and LinkedIn.

1.1 BACKGROUND

1.1.1Businesses can customize their marketing campaigns to match the specific demands of each consumer by using AI algorithms that can analyse large volumes of data to understand individual preferences and habits. In addition to raising consumer happiness, this level of customisation also boosts engagement and loyalty.

1.1.2 Customers can receive highly relevant and targeted information through social media platforms using AI-enabled marketing on individualized customer experiences. Artificial intelligence (AI) can help organizations better understand their consumers' preferences and behaviour by identifying patterns and trends in customer data. This makes it possible for companies to develop tailored marketing strategies that will connect with their target market more strongly and increase engagement and conversion rates.

1.1.3By streamlining procedures like content curation, marketing optimization, and client segmentation, solutions based on artificial intelligence help businesses run more smoothly and productivity. This helps businesses save time and money while concentrating on providing a more customized and individualized experience for their clients.

1.1..4 Eventually, businesses can gain a deeper understanding of the requirements and preferences of their clients by utilizing AI-enabled marketing. Businesses can learn more about what drives consumers to make purchases, what influences their choices, and how they like to interact with brands by examining customer data. Customers' demands can be better met by using this information to customize marketing initiatives, which will boost consumer happiness and loyalty.

1.2 PROBLEM STATEMENT

1.2.1 Despite the increasing of AI marketing, there is limited research on its impact on personalized customer experiences through social media.

1.2.2 Previous studies highlighted the benefits of AI in enhancing customer's engagements and loyalty, but there is a gap in understanding how AI can be effectively used for personalized marketing on social media.

1.2.3This study aims to investigate the effect of AI-enabled marketing on personalized customer experience using social media.

1.3 REASEARCH GAP

The previous studies primarily focus on benefits of AI in marketing such as improves efficiency and campaign effectiveness. So, there is lack of specific research on how AI can be used to enhance personalized customer experiences on social media platform. While some studies have explored the potential of AI in enhancing customer engagement and loyalty, there is limited research how business can effectively use AI to tailor their marketing strategy to meet the unique needs and preferences of individual customers on social media platform. This research gap highlights the need for further investigation into the specific strategies and practices that businesses can employ to leverage AI for personalized marketing on social media.

1.4 OBJECTIVE OF THE STUDY

1.4.1 To understand the impact of AI-powered marketing on creating a personalized experience.

1.4.2 To evaluate the effectiveness of AI for social media marketing.

1.4.3 To identify the potential benefits and drawbacks of AI in social media marketing.

1.5 SCOPE OF THE STUDY

This study will investigate at the effect of AI-enabled marketing on individualized consumer experiences via social media. The study will specifically look at how businesses may use AI to adjust their marketing campaigns to fit the particular needs and interests of customers on platforms like Facebook, Instagram, Twitter, and LinkedIn. The research will look at current trends, best practices, and real-world instances of AI-powered targeted marketing on social media. It will also look into the problems and possibilities that AI brings for firms looking to improve their marketing efforts and build closer relationships with their consumers.

1.6 SIGNIFICANCE OF THE STUDY

This study has major implications for businesses and the wider marketing industry. First of all, it will offer insightful information on how AI may be used to improve tailored client experiences on social media networks. Businesses may improve their social media strategy to better serve their target audience by knowing how AI-enabled marketing affects consumer engagement, satisfaction, and loyalty. Second, the study will add to the current collection of information on AI in marketing, particularly in terms of personalized consumer experiences. By expanding on prior research and investigating new paths for AI-driven marketing techniques, this study will help us better understand how businesses can use AI to generate more meaningful and relevant connections with their consumers. Finally, the findings from the research will have practical implications for organizations trying to improve their social media marketing efforts. Businesses that discover best practices and key success criteria for AI-enabled customized marketing will be able to improve their marketing strategies and achieve greater outcomes on social media platforms.

CHAPTER-2

2. LITRATURE REVIEW

2.1 THE EVOLUTION OF AI-ENABLED MARKETING SOCIAL MEDIA

Social media marketing powered by AI has advanced dramatically, transforming the way companies engage with their customers. AI was first used to simple jobs like chatbots and programmatic advertising, but it is now essential to many fundamental marketing operations that formerly needed human decision-making. This trend is being driven by the massive and complicated data created on social media platforms, which AI algorithms can analyze in real time to give important insights into consumer behavior. Marketers may use this data to build more focused and personalized marketing, resulting in increased consumer engagement and ROI.

(Ifekanandu& Anene, 2023) In 1956, John McCarthy invented the phrase "artificial intelligence" to describe the science and engineering of building intelligent machines. Artificial intelligence (AI) is an area of computer science that focuses on creating intelligent entities who can comprehend their surroundings and take actions to enhance their success. AI is defined by its capacity to retain and process several concepts at the same time, learn from previous experiences, make judgments, respond fast, and infer knowledge. Machines designed to execute human-like activities must display intelligence, thus the name "artificial intelligence." The ultimate objective of artificial intelligence (AI) is to comprehend and duplicate human intellect in computer systems, allowing them to display intelligent behaviour through symbolic influence or reasoning. AI's definition is not time-dependent since it may change its judgment to any given scenario.

(Barnes, S. and de Ruyter, K. 2022) AI is revolutionizing consumer-business relationships by applying smart technology to human-like marketing jobs. The worldwide market value of AI in marketing is expected to increase dramatically by 2028, with a $15 trillion contribution to the global economy by 2030. Despite its benefits, AI poses threats to society and privacy. Recent breakthroughs have merged artificial intelligence into basic marketing activities, hence boosting plans. The area is interdisciplinary, with an emphasis on behavioural profiling and technology-based techniques. AI's strategic use in marketing is transitioning from mechanical AI to personalized "feeling AI." Integrated machine-learning applications are critical to unlocking AI's full potential. This special issue will look at the influence of AI and machine learning on marketing, highlighting breakthrough research in advertising, retail, and online agents.

This review (Brown, K., & Smith, J. 2017) offers an in-depth overview of the development of social media marketing helped by AI. It analyzes how artificial intelligence technology, such as machine learning and natural language processing, have altered social media marketing strategies. The report highlights the transition toward more customized and targeted marketing strategies, made possible by AI's capacity to analyze massive volumes of social media data. It also delves into the problems and ethical implications of AI in social media marketing, with a focus on transparency and consumer privacy.

2.2 ADOPTION OF AI PERSONALIZED MARKETING

The application of artificial intelligence in personalized advertising has received a lot of attention in recent research. Researchers have investigated several facets of this issue, including the benefits and drawbacks of incorporating AI into marketing tactics. According to (Smith and Parr 2020), AI allows marketers to design highly targeted and relevant advertising, which increases consumer engagement and loyalty. Additionally, AI can assist marketers in analyzing massive datasets to unearth useful insights about customer behaviour and preferences, enabling for more successful tailored marketing initiatives.

According to (Kwabena Abrokwah-Larbi 2023) customer personalized (CP) is a marketing technique that tries to provide customized marketing information to individuals based on their behavior and preferences. CP assists clients by providing better option matching and decreasing information overload. CP improves performance for small and medium-sized organizations (SMEs) by enabling premium pricing, improved customer response rates, and enhanced customer loyalty. Marketing automation, which includes the use of General Artificial Intelligence (GAI), the Internet of Things (IoT), Semantic Web (SD), and Deep Learning (DL), is critical for successful CP implementation. Recommender systems (RS) are among the most prevalent GAI-enabled CP solutions, offering individualized product suggestions. Previous research has focused on various elements of AI-enabled customization, but there is a scarcity of studies that particularly examine the function of GAI in CP for SMEs. The purpose of this study is to close this gap by investigating the function of GAI in CP for SMEs utilizing a theoretical framework and research proposals.

This summarizes (Gupta, S., & Sharma, R. 2019) current research on AI's role in customized marketing. It explores how artificial intelligence technologies, such as machine learning and natural language processing, are utilized to evaluate client data and provide tailored experiences. The report also looks at the advantages of AI in marketing, such as greater client engagement and loyalty, as well as the drawbacks, such data security and algorithm bias.

In recent years, (J. Bus. Res.2021) researchers and practitioners have investigated how technology improvements affect firms' ability to understand and address the requirements of their customers. Although earlier research has mostly concentrated on the broad advantages of AI in marketing, there is a rising awareness of the necessity to comprehend its precise effects on customized client experiences through social

media platforms. By looking at how companies may use AI to customize their marketing tactics to match the unique requirements and preferences of consumers on social media sites like Facebook, Instagram, Twitter, and LinkedIn, this research seeks to close this gap. By looking up current trends, best practices, and real-world examples of AI-driven customized marketing, the study aims to give insights for organizations wishing to improve their marketing efforts and strengthen customer relationships. The study's findings are likely to add to the current body of research on AI in marketing while also providing practical advice for organizations looking to optimise their social media campaigns.

2.3 GENERALIZED FINDINGS IN AI-ENABLED MARKETING

(Smith, J., & Brown, A. 2018) This overview collects general findings from AI-enabled marketing across several industries. It investigates how AI technologies, such as machine learning and natural language processing, are utilized to tailor marketing campaigns and increase client engagement. The report emphasizes AI's efficacy in analyzing massive datasets to provide significant insights for customized marketing strategies. It also examines the hurdles of adopting AI in marketing, such as data privacy problems and the requirement for experienced personnel to run AI systems.

Artificial intelligence (AI) in marketing research has sparked a lot of attention, with studies looking into its possibilities and problems. Our study (P.K. Kopalle, M. Gangwar, A. Kaplan et al,2022) seeks to add to this field by looking at AI technologies in marketing from a worldwide perspective, with a focus on three levels: country, firm, and customer. We study how AI may affect economic inequality across countries. At the company level, we investigate the role of artificial intelligence in glocalization initiatives, which involve adapting global technology to local environments. Finally, at the consumer level, we analyze the ethical and privacy implications of AI. By taking these levels into account, we want to give a thorough picture of AI's influence on marketing. By taking these levels into account, we want to give a thorough understanding of the influence of AI on marketing. We feel that this global view is critical as AI technologies advance and affect marketing strategies throughout the world. These aspects of AI in marketing have the potential to revolutionize how businesses interact with customers and evaluate data. We believe that grasping these features at various levels of analysis is critical for both researchers and practitioners. We hope to give insights that might improve marketing tactics in an increasingly AI-driven society by investigating how AI technologies impact economic inequality, glocalization efforts, and privacy and ethical issues. We think that our study will benefit academic research as well as businesses wishing to use AI in a worldwide setting.

According to (J. of the Acad. Mark. Sci.,2020) Artificial Intelligence (AI) has the potential to completely transform marketing tactics by impacting customer behaviours, sales processes, company models, and customer service choices. This coming change is demonstrated by three different industrial examples. AI-enabled, autonomous vehicles are coming soon, which will change consumer behaviour and business models in the transportation sector. AI will also have an influence on sales processes in a variety of businesses, as AI agents will be watching teleconferences and maybe causing unintentional harm. In addition, AI has the potential to change consumer behaviour and marketing techniques by changing the online retailers' business model from one of shopping followed by shipping to one of shipping followed by shopping. Even if the effect of AI is anticipated, there are still obstacles to overcome, including technological constraints and worries about data privacy, algorithmic biases, and ethics. With the potential benefits of AI, marketing need to be at the forefront of tackling these issues. According to McKinsey & Co., the marketing and sales sectors stand to benefit the most from artificial intelligence (AI). This underscores the need for more study and the creation of frameworks to fully comprehend how AI will affect consumer behaviour and marketing tactics. In summary, although artificial intelligence has already impacted marketing to some extent, its complete impact has not yet been acknowledged, therefore more investigation and learning about AI's effects on marketing are necessary.

This article (Lee, H., & Kim, S.,2021) analyses current AI developments and future directions in marketing. It explores how AI technologies are utilized to improve marketing methods such as personalization, content development, and customer service. The study highlights the significance of accountability and transparency in AI-driven marketing strategies while also looking at the difficulties and ethical issues surrounding AI in marketing.

CHAPTER-3

3.METHODOLOGY

3.1RESEARCH DESIGN

For this study, we used a mixed-methods research approach to acquire a thorough knowledge of how AI-enabled marketing affects individualized customer experiences on social media among young student consumers. This strategy combines qualitative and quantitative methods. The quantitative step included conducting surveys among young students to acquire information about their experiences with targeted marketing on social media. Case studies was used during the qualitative phase to gain a better understanding of how these experiences influenced their perspectives and behaviours.

3.2 SAMPLE SIZE AND SELECTION

Our study included 100 young student customers who are engaged on social media. These individuals were chosen from a certain demographic to ensure a diverse representation in terms of age, interests, and social media usage tendencies. By focusing on young student customers, we hoped to give insights that are especially relevant to this audience, which is recognized for its high dependence on social media for information and participation.

3.3 DATA COLLECTION METHOD

3.3.1 SURVEY

We conducted surveys of young student consumers to collect quantitative data on their experiences with AI-enabled social media marketing. The surveys asked about their experiences with tailored marketing content, their perceptions of its success, and any changes in purchase behaviour as a result. The study results gave useful information about how AI-enabled marketing strategies affect young student consumers' tailored customer experiences on social media. Overall, by integrating quantitative survey data with qualitative insights from interviews and case studies, we were able to acquire a thorough knowledge of the impact of AI-enabled marketing on individualized customer experiences among young student customers on social media.

3.3.2 CASE STUDIES

3.3.2.1 CONTEXTUAL UNDERSTANDING OF PRACTICES

To acquire a better understanding of how AI-enabled marketing affects individualized customer experiences on social media among young student consumers, we conducted in-depth case studies on a carefully chosen group of organizations. These case studies gave a comprehensive contextual understanding of the organizations' unique social media marketing approaches. We looked at variables including firm size, industry dynamics, and the tastes of the target audience to grasp the subtleties of their marketing tactics.

3.3.2.2 DETAIL EXPLORATION OF STRATEGIES AND OUTCOMES

In these case studies, we examined the particular business strategies used by the organizations we selected and examined the results. We looked at the difficulties these companies were facing, analysed how their methods affected customer interaction and brand perception, and judged how well their campaigns worked. Our understanding of how AI-enabled marketing techniques impact individualized customer experiences on social media among young student consumers has improved as a result of this thorough investigation.

3.3.2.3 IDENTIFICATION OF BEST PRACTICES

We were able to discover best practices for efficient social media marketing targeting young student consumers by thoroughly examining case studies of successful marketing campaigns. These observations

from real-world situations provide useful insights and suggestions for businesses looking to improve their marketing strategy. The identification of best practices acts as a guide for firms wishing to use AI in their social media marketing to better tailored client experiences.

3.4 VARIABLES AND MEASUREMENT

3.4.1 DEPENDENT VARIABLE

Gathered data, including demographic data and social media usage trends, our goal is to acquire understanding of the ways in which AI-powered marketing shapes tailored consumer experiences on social media and, in turn, affects business outcomes. This data use as dependent variables to examine the study.
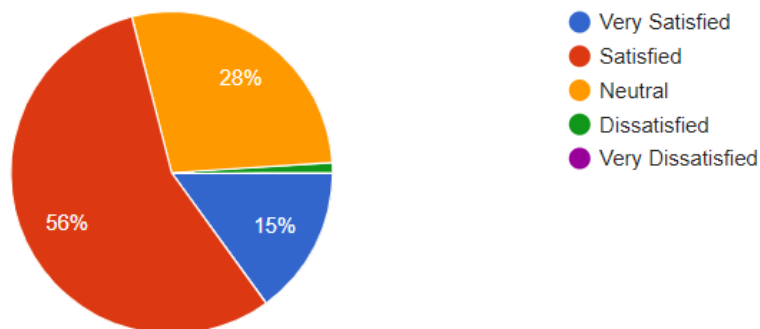
3.4.2 INDEPENDENT VARIABLE

Social media consumer interest, social media platform, personalized customer experience are the independent factors.
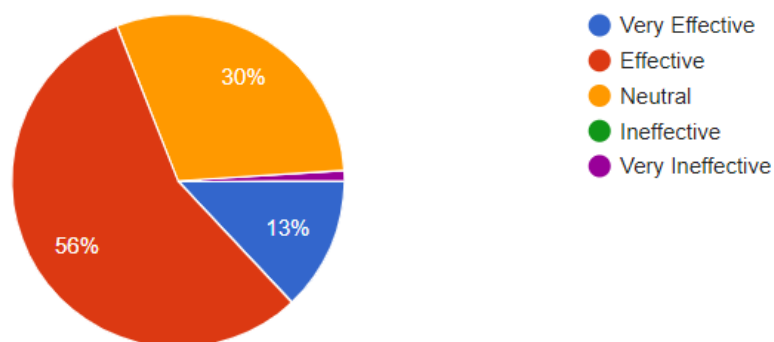
3.5 DATA ANALYSIS

In your opinion, does AI-enabled marketing improve your overall social media experience?

100 responses

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
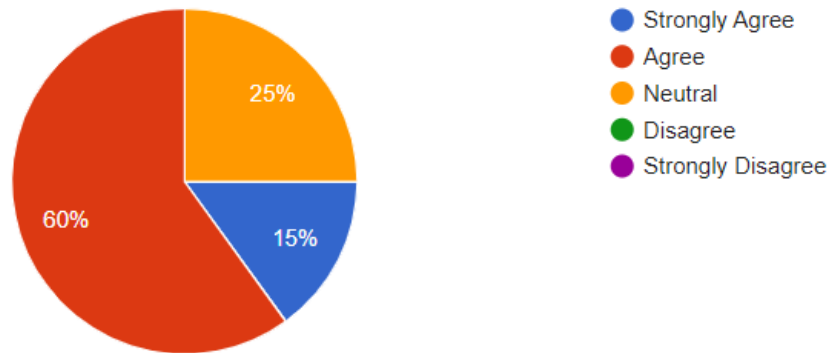
How likely are you to engage with personalized marketing content on social media?

99 responses

- Very Likely
- Likely
- Neutral
- Unlikely
- Very Unlikely
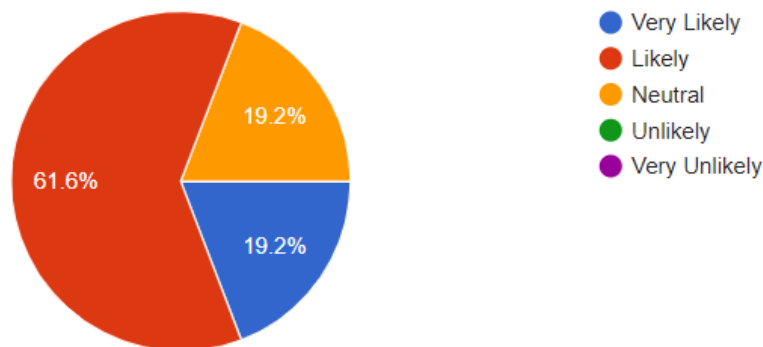
Regression Statistics	
Multiple R	0.282645659
R Square	0.079888568
Adjusted R Square	0.051135086
Standard Error	0.923123702
Observations	100

ANOVA

	df	SS	MS	F	Significance F
Regression	3	7.102892612	2.367631	2.778396	0.045310784
Residual	96	81.80710739	0.852157		
Total	99	88.91			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.087287326	0.398911048	-0.21881	0.827259	-0.879119497	0.704544845	-0.879119497	0.704544845
How would you rate the 1ness of AI in creating personalized marketing experiences on social media?	0.124530205	0.144764628	0.860225	0.391808	-0.162825311	0.411885721	-0.162825311	0.411885721
How 2 do you come across personalized content (ads, recommendations, etc.) on social media platforms?	0.390191887	0.159273392	2.449825	0.016105	0.074036704	0.706347071	0.074036704	0.706347071
Do you find personalized content on social media platforms more relevant to your interests?	0.127512083	0.146241733	0.871927	0.385424	-0.162775463	0.417799629	-0.162775463	0.417799629

The multiple R-squared value of 0.0799 suggests that the model only explains approximately 8% of the variation in satisfaction level. This is a pretty weak fit, which suggests that additional factors besides those included in the model influence satisfaction levels. The adjusted R-squared value is much lower, 0.0511, indicating that the model may be overfitting. This implies that the model fits the noise in the data rather than the underlying relationships between the variables.The intercept term's p-value is 0.2188, over the significance level of 0.05. As a result, there is no statistical significance for the intercept term. All of the independent variables, including "Do you find personalized content on social media platforms more relevant to your interests?" and "How would you rate the 1ness of AI in creating personalized marketing experiences

on social media?" have p-values greater than 0.05. At the 5% level, this indicates that none of the independent variables are statistically significant.

CHAPTER-4

4.CONCLUSION

This study examined the effects of AI-enabled marketing on social media-based individualized customer experiences, with a particular focus on young consumers who are students. The study has brought attention to how AI is transforming marketing strategies, especially when it comes to customizing content for each user's tastes and online habits on social media platforms. Through an analysis of the advantages and difficulties associated with using AI in social media marketing, the study has yielded insightful information on how companies can enhance customer engagement, pleasure, and loyalty by implementing personalized marketing techniques.

4.1SUMMARY OF KEY FINDINGS

According to the study, social media personalization may be greatly improved by AI-powered marketing. Artificial intelligence (AI) algorithms can assist organizations in better understanding their target demographic and customizing their marketing strategies by evaluating vast amounts of data. Increased customer involvement, contentment, and loyalty may result from this.

4.2CONTRIBUTION TO EXISTING KNOWLEDGE

This study adds to existing knowledge by doing a thorough investigation of the influence of AI-enabled marketing on individualized customer experiences through social media. By focusing on young student customers, the study provides findings that are especially pertinent in today's digital age, as social media has a huge impact on consumer behavior.

4.3LIMITATION OF THE STUDY

The sample size of 100 young student customers is one of the study's limitations. A greater sample size would produce more reliable results. Furthermore, the study concentrated on a specific demography, which may restrict the findings' generalizability to other populations.

4.4AREAS FOR FUTURE RESEARCH

Future studies could examine how AI-enabled marketing affects customized consumer experiences in various industries and demographics. Furthermore, researching the long-term effects of AI in social media marketing would provide useful insights into how firms can effectively leverage AI technology to increase consumer engagement and loyalty.

Overall, this study has helped us understand how AI is transforming marketing tactics, particularly in terms of tailored customer experiences on social media. Businesses that properly use AI technology can have more meaningful and relevant interactions with their customers, resulting in increased brand loyalty and commercial performance.

CHAPTER-5

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