Impact of Artificial Intelligence in Market Research

Dr Alka Singh Bhatt

Assistant Professor Amity Business School, Amity University Uttar Pradesh Email: asbhatt@amity.edu

Abstract:

Artificial Intelligence in Marketing is a rapidly emerging field that is transforming the way businesses approach their marketing strategies. With the explosion of data and the increasing complexity of customer behavior, businesses need to leverage these tools to stay competitive. This article explore the concept of Artificial Intelligence in Marketing, its role in modern marketing, its benefits and challenges, best practices for implementation, and ethical considerations. It will also look into the future of Artificial Intelligence in Marketing and its potential impact on the marketing landscape. This includes understanding customer needs and desires and aligning products to those needs and desires. A handle on changing customer behavior is vital to make the best marketing decisions. Artificial intelligence is reshaping almost all the aspects of doing business, from finance to sales and R&D to operations but the most profound impact of AI is being witnessed in the field of marketing where not only it has already created great value but experts predict it is going to change the future of marketing massively

Keywords: Artificial Intelligence, Market Research, Marketing decisions

I. Introduction

Before generative AI models like Chat GPT emerged, brainstorming topics, creating outlines, writing content and editing could take hours, if not days. Today, the process is as quick as asking AI tools to write marketing copy, such as promotional emails, ads, and articles. Users get output in seconds or a few minutes. This saves time for marketing experts who create content in bulk and regularly. Marketers can also use AI to create images, videos and audio.

Understanding the items that customers frequently purchase together can be very advantageous for retailers. This information can help physical stores group items that are often bought together or help online retailers design their catalogs and order forms more effectively. For instance, direct marketers can use the results of a basket analysis to determine which new products to offer to their existing customers.

When a company knows that customers who buy one product are likely to buy another, it can strategize to sell these items together or target customers with related offers. For example, placing a beer display near the diaper aisle can increase beer sales, and knowing that customers who buy a sweater and casual pants from a catalog are likely to buy a jacket can lead to increased jacket sales through targeted suggestions by phone representatives or bundled discounts.

Offering a discount on a package that includes the sweater, trousers and jacket can also boost overall sales. Approaching consumers who are already inclined to buy improves marketing efficiency, whether through in-store displays, catalog layouts, or direct offers. Market basket analysis enhances marketing and sales strategies by leveraging existing consumer data.

Notwithstanding the many benefits of integrating AI into different fields, such as marketing, serious worries about how it might result in dehumanization and privacy violations are becoming more widely acknowledged (Lobschat et al., 2021). According to Lobschat et al. (2021), researchers ought to concentrate on organizational privacy failures such as hacking, surveillance, microtargeting, profiling, and data leaks. Additionally, services literature ought to discuss how AI influences decision-making (Lobschat et al., 2021; Anayat & Rasool, 2024).

A discrepancy between strong interest in AI and its actual adoption was noted in earlier research (McElheran et al., 2024; Polisetty et al., 2023; Alwadain et al., 2024). Even though the field of AI research has grown considerably, there is still a significant lack of thorough research on the present and potential applications of AI techniques in marketing strategies (Haenlein & Kaplan, 2019). Even though AI is widely used in marketing, not much research has been done on the topic. This disparity is troubling because it restricts knowledge and useful suggestions for businesses looking to use AI for marketing expansion (Han et al., 2021).

The focus on AI marketing research necessitates a comprehensive synthesis of existing studies (Peyravi et al., 2020). A thorough and impartial examination of this important subject is also required, as evidenced by the inadequate integration of the bibliometric method with other methodologies in AI marketing research (Ismagiloiva

et al., 2020). Therefore, the current study used bibliometric analysis along with other methods to try to look at and analyze the literature that is currently available on AI in marketing.

Strategic market planning, brand building, brand management and understanding retail buying habits have become more crucial in India than ever before. The Indian marketing landscape is undergoing significant changes due to global challenges and competitive pressures. The number of dual-income households is increasing, and there has been a proliferation of brands in many consumer product categories. Consumers are becoming more sophisticated and quality-conscious. Consequently, costs related to advertising, product promotion, and marketing analysis are rising. The service sector is also expanding rapidly.

The planned entry of major players like Walmart and Amazon illustrates this shift. E-commerce, e-tailing, e-money, internet-based strategic digital marketing, interactive voice response, online shopping, virtual reality, and digital communication are driving both private and public sector companies to reevaluate their marketing strategies and adopt new, more powerful tools.

Market research

Market research is a systematic process of gathering, evaluating, and interpreting data. It forms the foundation of any successful business. This data can pertain to a target market, customers, competitors, or the industry as a whole. Market research serves various purposes, such as identifying new markets or launching new businesses. Impact of artificial intelligent enhances the market inights has been reported by several workers (Patel, & Garcia, 2021; Smith, & Johnson, 2023; Wang, & Kim, 2022). AI-Driven Market Segmentation: Strategies and Implementation Challenges. Journal of Marketing Technology, 12(1), 30-45. By conducting market research, entrepreneurs can make informed business decisions, eliminating guesswork from the innovation process and directing resources towards the most promising ideas and projects. Businesses utilize various types of market research to gather information about their target market, competitors, and industry trends. There are two main types of market research: quantitative and qualitative.

Quantitative Research

Quantitative research focuses on generating numerical data, such as the percentage of the population that purchases a specific product. This type of research is typically conducted using surveys and questionnaires. Simple quantitative research can be carried out by directly talking to customers.

More detailed quantitative research helps identify markets and understand customer profiles, which is particularly useful when launching a new product.

Qualitative Research

Qualitative research, on the other hand, delves into understanding what people think and feel about products, as well as the factors that influence their purchasing decisions. This research relies on collecting facts and figures through surveys and focus groups. Interpreting the results of qualitative research requires specific analytical skills.

The Importance of Market Research for a Business

Market research is crucial for businesses as it offers valuable insights into customer behavior, market trends, and competitive dynamics. Here's why market research is essential for your business:

Identifies New Products and Services

Market research helps you determine the need for new products or services in the market and guides you on how to develop them effectively. By identifying key issues early, you can avoid costly mistakes in product development. It also highlights the factors most important to customers, ensuring that your offerings meet their needs and preferences.

Establishes Product or Service Viability

Before launching a new product or service, market research helps you assess market readiness. It answers critical questions such as whether the product will be well-received, whether there is a demand for it, and its likelihood of success, ensuring your offerings meet market needs.

Keeps Your Company Ahead of Competitors

Comparative studies through market research allow you to track your competitors' progress. Understanding what competitors are doing differently and effectively provides opportunities to refine your business strategies and stay competitive.

Reduces Risk and Enhances Profitability

By providing knowledge on past and future market trends, market research helps reduce business risks. It allows you to determine market viability and understand customer needs, which in turn helps minimize the risk of failure and enhances profitability.

Helps to Understand Existing Customers

Customers' needs evolve over time, and what they required previously may not be what they need now. Continuous market research helps you stay attuned to the current preferences and satisfaction levels of your customers, enabling you to make necessary adjustments to maintain high satisfaction and loyalty.

Helps Set Realistic Goals

Using up-to-date market and customer data, you can set realistic business goals. Establishing a growth pattern over time informs you of future expectations and aids in developing sustainable growth strategies. Realistic goal-setting ensures efficient resource utilization and helps avoid the pitfalls of setting unattainable objectives.

In summary, market research is a vital tool for businesses to make informed decisions, understand and meet customer needs, stay competitive, reduce risks, and set achievable goals.

II. Literature Review

This ambivalence is also evident in academia, where qualitative research is sometimes dismissed as disreputable, a field not worthy of association for successful individuals. Consequently, practical information on qualitative research and its applications is scarce. This gap in market research literature makes it difficult to appreciate the opportunities and benefits this research method offers. Hence, the introduction of a new journal on qualitative market research is timely, addressing the need for a clear definition and positioning of the field .

Qualitative research doesn't quantify data but offers deep insights. These insights are derived through analyzing and integrating the perspectives of respondents. Attitudes and behaviors are perceived as an interconnected whole (Gestalt), partially conscious and partially subconscious. In qualitative research, these are deconstructed into components, assigned to abstract dimensions such as meanings, motivations, associations, and emotions, and then reintegrated into a comprehensive picture that can inform organizational marketing strategies.

Qualitative research involves both a quest for answers and a search for the right questions simultaneously. Data collection and analysis occur concurrently. As illustrated earlier, qualitative research is adaptable, allowing researchers to follow the natural flow of conversations with consumers. This approach is particularly suited for idea generation, offering researchers the freedom to explore tangents that may lead to new insights. Protocols based on audio or video recordings are merely aids in the analytical process, which largely depends on integrating impressions gathered throughout the research journey, including briefing sessions and consumer interviews where both verbal and non-verbal cues are equally significant.

This does not imply that qualitative research is simply about asking a series of open-ended questions. On the contrary, the reliability of qualitative research can be ensured through systematic approaches in interviews or focus groups. It is crucial to maintain a structured approach at the research design level, including methods, techniques, and interview protocols. However, researchers must also have the freedom to explore emerging points of interest during the study. Thus, while systematic operation is essential for ensuring reliability, flexibility is equally important for uncovering deeper insights.

Benefiting from the use of AI

There are many advantages to using artificial intelligence (AI) in marketing, which is transforming how companies communicate with their clients and maximize advertising efforts. Through chatbots, recommendations and personalization, marketers can enhance the customer experience by utilizing AI-powered tools. AI also improves decision-making through predictive analytics, automates tedious tasks, and increases return on investment through lead generation and optimized advertising. Predictive lead scoring, content creation, email marketing automation, chatbot-based customer service, social media monitoring, influencer marketing, and account-based marketing are some of the AI-powered marketing techniques that are gaining popularity. These tactics help companies stay ahead of the competition, boost productivity, and more precisely target their audience. Businesses should start small, concentrate on the customer experience, track and evaluate performance, guarantee data quality, and stay current with regulations if they want to successfully integrate AI in marketing. Marketers can fully utilize AI and propel business expansion by adhering to these best practices. HubSpot AI, Marketo AI, Salesforce Einstein, Adobe Sensei, Google Cloud AI Platform, IBM Watson and Microsoft Azure Machine Learning are just a few of the AI-powered marketing tools that are available. These tools give marketers the framework they need to create and carry out AI-powered campaigns. With new trends like voice search optimization, visual search, AI-powered video content creation, AI-driven podcast advertising, and increased use of augmented reality (AR) and virtual reality (VR), the future of AI in marketing looks bright. Businesses that embrace these innovations will benefit greatly as AI technology develops further.

By embracing AI in marketing, businesses can unlock new opportunities, drive growth, and stay competitive in an ever-changing landscape. Whether through chatbots, predictive analytics, or content generation, AI is transforming the marketing landscape, enabling businesses to connect with customers more effectively and efficiently. What impact does AI have on marketing and sales, and how does it influence business KPIs? A study

by HubSpot reveals that marketing professionals typically dedicate 16 hours each week to routine tasks. These tasks include entering lead information into a CRM system, monitoring competitors' prices for similar products and services, responding to customer inquiries in chats, and segmenting clients, among other activities. This 16-hour workload amounts to nearly half of a standard workweek.

CMOs can address this by incorporating AI into marketing and sales departments. By allowing algorithms to handle routine tasks, resources are freed up for more creative endeavors. IT research and consulting firm Gartner Inc. forecasts that global AI spending will reach \$62.5 billion in 2022, marking a 21.3% increase from 2021. Marketing and sales will receive a significant portion of this investment.

This trend is expected, as AI enables marketing professionals to pinpoint which ads yield higher revenue, detect drops in click-through rates promptly, and predict shifts in customer behavior. This allows for targeted investigations based on the data changes observed. Such AI-driven strategies, along with other data-focused campaigns, are projected to boost sales of products or services by more than 10%. Let's explore how companies leverage AI in marketing to enhance sales.

Levi Strauss & Co. announced that it utilized AI and a comprehensive data repository built on Alphabet Inc.'s Google Cloud to drive revenue growth and improve margins. The clothing company fed its machine learning (ML) pipeline with shopper information from this repository, supplemented by external data from private and public sources tracking consumer buying behaviors, weather forecasts, and more. Levi Strauss & Co. employed the ML model to forecast demand, enhance personalized marketing, make informed pricing decisions, and predict sales.

For instance, an ML model identified that a particular T-shirt had become popular among female consumers in China. Although the sales department was inclined to discount the product, ML analysis recommended maintaining the current price based on predicted sales volume and anticipated revenue.

AI-enabled chatbots are invaluable for marketers, saving a company significant time and resources. Powered by machine learning algorithms, these chatbots can be activated by specific customer behaviors, such as reading certain content or interacting with elements on a web page. When contacted through any messaging app, chatbots can perform tasks typically handled by human customer support managers. They can be programmed to align with a business's specific buyer personas and engage in conversations using a particular tone of voice to maximize interaction with these personas.

III. Conclusion

AI has emerged as a powerful ally for market researchers seeking deeper insights and more accurate forecasts. By leveraging advanced algorithms and machine learning techniques, organizations can unlock new opportunities for understanding consumer behavior, identifying market trends, and making data-driven decisions with unprecedented precision and efficiency. However, while AI presents immense potential, it also poses challenges related to data privacy, ethical considerations, and the need for human oversight. ensuring that AI remains a force for positive transformation in the dynamic landscape of market research. Ultimately, by harnessing the capabilities of AI responsibly and creatively, we can pave the way for a future where market research becomes more insightful, agile, and impactful than ever before.

References

- [1]. Alwadain, A., Fati, S. M., Ali, K., & Ali, R. F. (2024). From theory to practice: An integrated TTF-UTAUT study on electric vehicle adoption behavior. PloS One, 19
- [2]. Anayat, S., & Rasool, G. (2024). Artificial intelligence marketing (AIM): connecting-the-dots using bibliometrics. Journal of Marketing Theory and Practice, 32(1), 114–135.
- [3]. Haenlein, M., & Kaplan, A. (2019). A brief history of artificial intelligence: On the past, present, and future of artificial intelligence. California Management Review, 61, 5–14.
- [4]. Han, R., Lam, H. K., Zhan, Y., Wang, Y., Dwivedi, Y. K., & Tan, H. K. (2021). Artificial Intelligence in business-tobusiness marketing: A bibliometric analysis of current research status, development and future directions. Industrial Management & Data Systems, 121, 2467–2497
- [5]. Ismagiloiva, E., Dwivedi, Y., & Rana, N. (2020). Visualising the knowledge domain of artificial intelligence in marketing: A bibliometric analysis. In IFIP international federation for information processing (pp. 43–53).
- [6]. Lobschat, L., Mueller, B., Eggers, F., Brandimarte, L., Diefenbach, S., Kroschke, M., & Wirtz, J. (2021). Corporate digital responsibility. Journal of Business Research, 122(open in a new window), 875–888
- [7]. McElheran, K., Li, J. F., Brynjolfsson, E., Kroff, Z., Dinlersoz, E., Foster, L., & Zolas, N. (2024). AI adoption in America: Who, what, and where. Journal of Economics & Management Strategy, 33, 375–415
- [8]. Patel, S. K., & Garcia, M. A. (2021). Leveraging AI for Enhanced Market Insights: A Case Study of the Retail Sector. International Journal of Market Analysis, 8(3), 45-60.
- [9]. Peyravi, B., Nekrošienė, J., & Lobanova, L. (2020). Revolutionized technologies for marketing: Theoretical review with focus on artificial intelligence. Business: Theory and Practice, 21, 827–834.
- [10]. Polisetty, A., Chakraborty, D., G, S., Kar, A. K., & Pahari, S. (2023). What determines AI adoption in companies? Mixed-method evidence. Journal of Computer Information Systems, 1–18.
- [11]. Smith, J. D., & Johnson, R. L. (2023). The Impact of Artificial Intelligence on Market Research: A Comprehensive Analysis. Journal of Market Research, 15(2), 102-118.
- [12]. Wang, Q., & Kim, H. (2022). AI-Driven Market Segmentation: Strategies and Implementation Challenges. Journal of Marketing Technology, 12(1), 30-45.