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AI Applications in Marketing Management

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Abstract

This study examines the increasing role of Artificial Intelligence (AI) applications in enhancing the effectiveness of marketing campaigns, focusing on the technology sector in Saudi Arabia. The study aims to understand how AI is used to improve marketing strategies, enhance customer experiences, and increase return on investment (ROI).

The study highlights several key areas where AI can drive transformative change in marketing, including:

Big Data Analysis:

AI can process vast amounts of data quickly and accurately, enabling companies to extract deep insights into customer behavior and market trends.

Personalized Marketing:

AI allows companies to design personalized marketing campaigns that target customers based on their preferences and purchasing behavior, enhancing customer engagement and satisfaction.

Marketing Automation:

AI facilitates the automation of routine tasks such as sending marketing messages, managing advertising campaigns, and analyzing performance, saving time and resources while improving operational efficiency.

Predicting Future Behavior:

Using predictive analytics, AI helps companies forecast future customer needs and develop proactive strategies to meet those needs.

Enhancing Customer Experience:

Through tools like chatbots and recommendation systems, AI can deliver personalized and immediate customer experiences, fostering brand loyalty.

The study concludes that AI has become a crucial tool for improving marketing performance and enabling companies to make data-driven decisions. It also emphasizes the need for clear strategies to effectively integrate AI with traditional marketing practices while addressing challenges related to data privacy and the high costs of adopting these technologies.

Key Recommendations:

- **Investing in AI Tools:** To improve customer targeting and content personalization.
- **Enhancing Privacy and Security:** By developing clear policies to protect customer data.
- **Employee Training:** To empower staff to use AI technologies effectively.
- **Leveraging Big Data:** To improve marketing decisions and increase ROI.

Keywords:

Artificial Intelligence, Marketing Campaign Effectiveness, Technology Sector, Saudi Arabia, Content Personalization, Customer Targeting, Return on Investment (ROI).

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Chapter 1

Introduction:

The field of marketing management in the modern era is undergoing a radical transformation due to rapid advancements in artificial intelligence (AI) technologies. These technologies have become a fundamental pillar in planning, analyzing, and executing marketing strategies. AI is a powerful tool that enables companies to process vast amounts of data quickly and accurately, extract deep insights into customer behavior, and predict future market trends. These capabilities empower marketers to design and implement more effective and efficient marketing campaigns, enhancing companies' ability to achieve their marketing objectives (Rust & Huang, 2021).

Additionally, AI is revolutionizing how companies interact with their customers by providing advanced tools to better understand customer preferences and expectations. For example, companies can use AI algorithms to analyze historical data and identify customer behavioral patterns, allowing them to personalize marketing offers. This personalization not only increases the effectiveness of marketing campaigns but also enhances customer experience and strengthens brand loyalty.

According to recent industry reports, the adoption of AI in marketing is experiencing rapid growth. For instance, PwC (2023) estimates that AI applications in marketing will contribute approximately USD 1.4 trillion to the global economy by 2030. This substantial growth reflects the increasing role of AI in improving marketing processes, enabling marketers to target customers with greater precision, personalize content individually, and enhance customer engagement with brands.

Moreover, AI enables companies to perform real-time data analysis, allowing them to make quick, informed decisions based on immediate changes in customer behavior or market conditions. This flexibility is crucial in a highly competitive and rapidly changing world, where companies risk losing market share if they fail to adapt swiftly to customer demands.

AI applications in marketing encompass a wide range of services, including customer self-service through chatbots, predictive analytics, automated content creation, and campaign optimization. For instance, AI technologies such as virtual assistants provide 24/7 customer support at lower costs compared to traditional methods (Davenport et al., 2020).

Among these challenges are ethical concerns related to data usage, risks of violating customer privacy, and the high costs of adopting AI technologies. For example, companies may face criticism from customers or human rights organizations if personal data is used without informed consent (Jobin et al., 2019).

Additionally, the costs of developing and implementing AI systems can be high. These costs pose a particular burden on small and medium-sized enterprises (SMEs) that may lack the resources to adopt these technologies. Such challenges require organizations to implement clear risk management strategies and ensure the responsible and transparent use of AI technologies (Bughin et al., 2018).

In this context, this research aims to examine the impact of AI applications on the effectiveness of marketing campaigns, with a particular focus on the technology sector in Saudi Arabia.

The study will analyze how AI is used to enhance marketing processes, identify the challenges companies face when adopting these technologies, and

propose effective strategies for integrating AI into marketing plans (PwC, 2023).

Through this research, the goal is to bridge the gap between the theoretical capabilities of AI and its practical applications in the real world. The research aims to improve the effectiveness of marketing campaigns in the Saudi technology sector. Furthermore, practical recommendations will be provided for companies seeking to adopt AI to enhance their marketing performance while considering the ethical and financial challenges they may encounter (Davenport et al., 2020).

Problem statement

The rapid advancements in Artificial Intelligence (AI) have ushered in a new era of innovation across various industries, with marketing management being one of the most significantly impacted fields. AI has revolutionized traditional marketing practices by introducing unprecedented levels of automation, enhancing customer engagement, and enabling data-driven decision-making. These capabilities have allowed organizations to analyze vast amounts of data, predict consumer behavior, and deliver personalized experiences at scale. However, despite these transformative benefits, the adoption of AI in marketing remains uneven, with many organizations struggling to fully integrate AI into their strategies due to several persistent challenges (Rust & Huang, 2021).

One of the most pressing issues is the knowledge gap that exists within many organizations. While AI offers immense potential, its complexity often requires specialized expertise to implement and manage effectively. Many marketing teams lack the technical skills or understanding needed to leverage AI tools, leading to underutilization or even failed implementations. Additionally, ethical concerns surrounding AI, particularly in relation to data privacy, have become

a significant barrier to adoption. The large-scale collection and analysis of consumer data, while essential for AI-driven marketing, raise critical questions about consent, transparency, and the potential misuse of personal information. These concerns have not only slowed the widespread adoption of AI but have also led to increased regulatory scrutiny, further complicating its implementation (Chaffey & Smith, 2022).

Another major obstacle is the high cost of adoption. Implementing AI technologies often requires substantial financial investment in infrastructure, software, and talent. For many organizations, especially small and medium-sized enterprises (SMEs), these costs can be prohibitive. Moreover, the uncertainty surrounding the return on investment (ROI) of AI initiatives has made decision-makers hesitant to commit resources. Without clear evidence of measurable business outcomes, such as increased customer engagement, higher conversion rates, or revenue growth, organizations are reluctant to fully embrace AI-driven marketing strategies (Jarek & Mazurek, 2019).

In the context of the tech sector in Saudi Arabia, the adoption of AI in marketing is gaining traction, but businesses continue to face significant challenges in measuring its effectiveness. While AI promises to enhance marketing campaign performance, many firms struggle to quantify its impact. Questions remain about whether AI-driven strategies genuinely lead to improved customer engagement, higher conversion rates, or sustainable revenue growth. This uncertainty is compounded by the lack of standardized metrics and frameworks for evaluating AI's contribution to marketing success (Davenport et al., 2020).

Furthermore, organizational resistance to change poses a significant barrier to AI adoption. Many companies are accustomed to traditional marketing methods and are hesitant to overhaul their existing processes. This resistance is often rooted in a fear of the unknown, as well as concerns about job displacement and the potential disruption of established workflows. Without a clear

understanding of how AI can complement and enhance human efforts, organizations are unlikely to fully embrace its potential.

The primary objective of this research is to bridge the gap between AI's theoretical capabilities and its practical application in marketing management. By identifying the key challenges hindering AI adoption, this study aims to provide actionable insights and strategies that organizations can use to overcome these barriers. Additionally, the research seeks to explore how AI-driven marketing strategies can be optimized to deliver measurable business success, such as increased customer engagement, higher conversion rates, and sustained revenue growth.

The research problem is summarized by answering the following question:

How do AI applications affect the effectiveness of marketing campaigns in the tech sector in Saudi Arabia?

Importance of the study

Theoretical Importance

1. Enriching Academic Literature:

This study contributes to enhancing the academic literature on artificial intelligence (AI) applications in marketing, particularly in the technology sector. By analyzing the impact of AI on the effectiveness of marketing campaigns, the study provides new insights into how modern technologies can improve marketing performance.

2. Bridging the Research Gap:

Despite the rapid global advancement of AI, there remains a research gap concerning its applications in the Saudi context. This study aims to bridge this gap by analyzing the role of AI in improving the

effectiveness of marketing campaigns in the technology sector in Saudi Arabia.

3. Enhancing the Discussion on Ethics and Privacy:

The study raises discussions on the ethical challenges and data privacy risks associated with using AI in marketing. By exploring these issues, the study contributes to a deeper academic understanding of how to adopt AI responsibly.

4. Developing Marketing Theories:

This study helps to develop marketing theories by exploring how AI transforms traditional marketing strategies into data-driven and predictive analytics-based approaches.

Practical Importance

Improving Marketing Campaign Efficiency:

The study provides practical insights into how AI can enhance the efficiency of marketing campaigns through automating data analysis, customer segmentation, and personalized content creation. This helps companies reduce costs and increase return on investment (ROI).

1. Enhancing Customer Engagement and Satisfaction:

The study illustrates how AI can improve customer engagement by predicting their behaviors and preferences. This allows companies to deliver personalized experiences, fostering loyalty and satisfaction, and building stronger customer relationships.

2. Enabling Smarter Marketing Decisions:

The study offers practical tools to empower companies to make smarter, real-time marketing decisions using predictive analytics and process automation. This increases the responsiveness and effectiveness of marketing campaigns.

3. Providing Strategies to Overcome Challenges:

The study offers practical recommendations for companies to address challenges associated with adopting AI, such as high costs and ethical concerns. These recommendations include ensuring compliance with legal frameworks and the responsible use of data.

4. Enhancing the Competitiveness of Saudi Companies:

In the context of Saudi Arabia, the study provides strategic insights that help technology companies enhance their competitiveness in the digital market. By analyzing AI-driven marketing strategies, the study offers tools to improve product positioning and increase market share.

5. Supporting Digital Transformation:

The study supports digital transformation efforts in Saudi Arabia by offering recommendations on how to integrate AI into marketing strategies. This helps companies adapt to and capitalize on rapid technological changes.

6. Guiding AI Investment Decisions:

The study provides a practical framework to assist companies in evaluating the feasibility of investing in AI technologies. By analyzing the benefits and challenges, the study helps organizations make informed decisions regarding AI adoption.

Study Questions:

Main Question:

How do AI applications affect the effectiveness of marketing campaigns in the technology sector in Saudi Arabia?

Sub-Questions:

1. What are the main AI tools and technologies used to improve the effectiveness of marketing campaigns?
2. How does AI contribute to enhancing customer targeting accuracy and content personalization?
3. What is the relationship between AI-driven personalization and customer satisfaction?
4. What measurable benefits do companies gain from adopting AI in marketing?
5. What are the main challenges faced by technology companies when adopting AI for marketing purposes?
6. What strategies can organizations adopt to overcome barriers to AI implementation?
7. How can companies ensure the successful integration of AI into their marketing strategies?
8. What are the emerging trends and future applications of AI in marketing within the Saudi technology sector?

Research Objectives

General Objective:

This study aims to analyze the impact of AI applications on the effectiveness of marketing campaigns in the technology sector in Saudi Arabia.

Specific Objectives:

1. Identify the main AI tools and technologies used to improve the effectiveness of marketing campaigns.
2. Analyze the role of AI in enhancing customer targeting accuracy and content personalization.
3. Examine the relationship between AI-driven personalization and customer satisfaction.
4. Measure the tangible benefits companies achieve from adopting AI in marketing.
5. Identify the main challenges faced by technology companies when adopting AI for marketing purposes.
6. Propose strategies to overcome barriers to AI adoption and maximize its effectiveness.
7. Explore how to ensure the successful integration of AI into marketing strategies.
8. Analyze emerging trends and future applications of AI in marketing within the Saudi technology sector.

Hypotheses

The study is guided by the following hypotheses to explore the applications and implications of Artificial Intelligence (AI) in marketing management:

1. AI applications positively impact the effectiveness of marketing campaigns in the technology sector in Saudi Arabia.
2. Key AI tools and technologies (such as chatbots and predictive analytics) contribute to improving the effectiveness of marketing campaigns.
3. AI enhances customer targeting accuracy and content personalization, leading to increased customer engagement and satisfaction.
4. There is a positive relationship between AI-driven personalization and customer satisfaction.
5. Companies achieve measurable benefits (such as increased return on investment and improved performance indicators) from adopting AI in marketing.
6. Technology companies face major challenges (technical, financial, and ethical) when adopting AI for marketing purposes.
7. Proposed strategies help overcome barriers to AI adoption and maximize its effectiveness.
8. Successful integration of AI into marketing strategies ensures improved overall marketing performance.
9. Emerging trends and future applications of AI in marketing within the Saudi technology sector enhance companies' competitiveness.

Chapter 2 Literature Review:

In recent years, there has been a significant development in the applications of artificial intelligence (AI) in the field of marketing, as these technologies have become essential tools for enhancing the effectiveness of marketing campaigns and improving customer experiences.

With the increasing reliance of companies on AI to analyze big data, personalize content, and make marketing decisions, numerous studies have emerged highlighting the impact of these applications on improving marketing performance.

This section will review the most prominent previous studies that address the role of AI in enhancing the effectiveness of marketing campaigns, focusing on the challenges and opportunities faced by companies, particularly in the technology sector.

This review will contribute to building a comprehensive theoretical framework for understanding how companies can leverage AI to achieve their marketing objectives more efficiently and effectively.

First: Previous Studies

AI technologies are employed in functions including but not limited to customer segmentation; customer analytics; content marketing; and CRMs. These applications are detailed by Chintalapati and Pandey in their publication of 2022 but underscore how they have revolutionized marketing functions. The authors emphasize on how the use of AI supports unique marketing campaigns where customer data is analyzed and trends are established to support the creation of messages to be sent to different audiences. Similarly, Verma et al. (2021) it is

also possible to learn about AI's contribution to predictive analysis, which enables an organization to understand the propensity of relevant markets, design the most efficient approaches to campaigns, and distribute resources for the most efficient ways. All these capabilities make AI essential when trying to achieve marketing objectives in the current ever-changing business setting.

1. Chintalapati and Pandey's Study (2022) "The Impact of Artificial Intelligence Technologies on the Development of Marketing Strategies":

This study highlighted the pivotal role of artificial intelligence (AI) technologies in developing and enhancing marketing strategies. It addressed a range of advanced applications used in customer segmentation, big data analysis, content marketing, and customer relationship management (CRM). The study demonstrated how these technologies have brought about a fundamental shift in traditional marketing methods, where AI has become an effective tool for analyzing large volumes of customer data and deriving behavioral patterns and trends. These insights assist in crafting personalized marketing messages tailored to the needs of various audience segments.

The researchers emphasized that integrating AI into marketing campaigns enables companies to enhance customer experience through effective and targeted communication, which boosts engagement and response rates. The study also indicated that the continuous analysis of customer data using AI helps organizations develop flexible and precise strategies that adapt to market changes and better meet customer expectations.

2. Verma et al.'s Study (2021) titled: "AI-Powered Predictive Analytics and Its Impact on Marketing Campaign Efficiency":

This study examined the contribution of AI to predictive analytics and how it can be used to improve the efficiency of marketing campaigns. The researchers focused on the role of AI in understanding target market trends and predicting future customer behavior, enabling companies to design precise marketing strategies and allocate resources more efficiently to maximize return on investment (ROI).

The study confirmed that AI technologies allow organizations to analyze data in real-time, facilitating quick, data-driven decision-making. Additionally, the study highlighted that AI not only enhances targeting accuracy but also improves content personalization, leading to increased engagement and brand loyalty. The researchers recommended the adoption of AI as a core component of marketing strategies to maintain competitiveness and achieve growth objectives amid the rapid changes in the business environment.

3. Saura and Ribeiro-Soriano's Study (2021) titled: "Integrating Artificial Intelligence in B2B Marketing and Its Impact on Customer Relationship Management Strategies":

This study thoroughly examined how artificial intelligence (AI) technologies are applied in business-to-business (B2B) marketing, with a particular focus on the development of Customer Relationship Management (CRM) systems. The study emphasized that integrating AI into these systems represents a significant advancement that supports real-time decision-making by analyzing customer data and providing accurate insights to enhance the quality of marketing decisions.

The researchers highlighted that AI-powered CRM systems enable companies to personalize marketing experiences and improve customer engagement by responding swiftly to market changes. Furthermore, the study confirmed that using AI in this context facilitates the analysis of big data and delivers instant recommendations, enhancing companies' ability to retain existing customers and attract new ones more efficiently.

The study concluded that integrating AI with CRM systems brings a transformative shift in enhancing customer interaction and developing data-driven marketing strategies that are continuously updated.

4. Mustak et al.'s Study (2021) titled: "Scientometric Analysis to Identify Gaps and Future Opportunities in AI Research in Marketing":

This study aimed to provide a comprehensive analytical perspective on AI research in the marketing field using scientometric analysis to identify research gaps and future opportunities. The study revealed that AI possesses significant capabilities in processing real-time data, enabling companies to automate repetitive marketing tasks, such as personalized advertising and directing marketing campaigns based on customer behavior.

The research confirmed that AI significantly enhances the level of personalization by analyzing customer preferences and offering tailored recommendations that accurately meet their needs. The researchers emphasized that these advanced capabilities make AI a critical component in enhancing companies' competitiveness in dynamic business environments. Additionally, the study highlighted an increasing need to develop comprehensive and cost-effective AI solutions to address the needs of companies of all sizes, calling for

further research to explore effective ways to deploy these technologies across diverse marketing contexts.

5. Huang and Rust's Study (2021) titled: "Classification of AI Applications in Marketing and Their Impact on Operational Performance":

In their study, Huang and Rust presented a detailed classification of AI applications in marketing, which includes mechanical AI, analytical AI, and emotional AI.

- Mechanical AI supports operational excellence by performing routine tasks such as preparing email campaigns and scheduling applications to run at specific times, improving operational efficiency and reducing costs.
- Analytical AI encompasses advanced data analysis and consumer behavior prediction techniques, aiding strategic decision-making based on accurate insights.
- Emotional AI simulates human interaction through interactive chatbots that provide personalized and empathetic responses to customers, enhancing user experience.

The researchers concluded that this classification offers a systematic framework to help companies effectively implement AI technologies to achieve their marketing goals and improve customer experience.

6. Haleem et al.'s Study (2022) titled: "Ethical Issues and Privacy Concerns in AI Applications in Marketing":

This study addressed the ethical challenges and privacy concerns associated with using AI in the marketing field. The researchers pointed out that algorithms

used to analyze customer data raise concerns regarding transparency and consent, necessitating stricter regulations to manage these issues.

The study also indicated that unclear mechanisms for data collection and usage may violate customer privacy, highlighting the importance of adopting ethical practices at all stages of data processing. The researchers recommended that companies strike a balance between leveraging AI technologies and maintaining privacy and ethical standards to build customer trust and enhance corporate reputation.

7. Vlačić et al.'s Study (2021) titled: "Technical and Financial Challenges of AI Implementation in SMEs":

This study explored the technical and financial challenges faced by small and medium-sized enterprises (SMEs) when implementing AI technologies. The researchers found that SMEs encounter difficulties such as high implementation costs, a shortage of skilled personnel to operate advanced systems, and technical complexities in integrating AI with existing infrastructures.

The study recommended providing affordable AI solutions and specialized training programs to improve competency in using these technologies. The researchers emphasized that overcoming these challenges is a crucial step for enhancing the competitiveness of SMEs in modern markets.

8. Rust and Huang's Study (2021) titled: "The AI Revolution in Marketing":

This study examined the impact of artificial intelligence (AI) on the development of marketing practices, emphasizing that AI has become a fundamental element in data analysis, decision-making, and designing marketing campaigns with greater accuracy and efficiency.

The researchers categorized AI applications into three types:

- **Mechanical AI:** Used for automating routine tasks such as sending messages and managing campaigns, thereby enhancing operational efficiency.
- **Analytical AI:** Focuses on analyzing data and predicting consumer behavior, aiding in strategic decision-making based on precise insights.
- **Emotional AI:** Simulates human interaction through intelligent chatbots, improving customer experience and fostering brand loyalty.

The study highlighted that AI adoption leads to improved efficiency and cost reduction but faces challenges related to privacy and transparency. The researchers recommended adopting an ethical approach to AI implementation to ensure trust and achieve sustainable competitive advantage.

9. **Davenport, Ronanki, and Luks's Study (2020) titled: "AI for the Real World":**

This study explored how artificial intelligence (AI) is applied in real-world business environments, focusing on implementation strategies and associated challenges. The researchers emphasized that companies successful in implementing AI adopt a gradual approach, starting with small-scale projects and expanding based on outcomes.

The researchers categorized AI applications in business into three main types:

- **Robotic Process Automation (RPA):** This type is used to perform repetitive tasks such as data processing, enhancing efficiency and reducing human errors.
- **Advanced Data Analytics:** This involves extracting insights from vast amounts of data to support strategic decision-making.

- **Cognitive Interaction:** This is used for customer engagement through systems like chatbots and virtual assistants to improve user experience.

The study highlighted that companies leveraging AI experience significant performance improvements and can offer personalized services to customers. It also stressed the importance of having robust technical infrastructure and specialized skills to ensure the successful implementation of AI projects.

10.Jarek and Mazurek's Study (2019) titled: "Marketing and Artificial Intelligence":

This study examined the impact of artificial intelligence (AI) on marketing strategies and how it can be leveraged to improve marketing efficiency and enhance customer experience. The researchers focused on analyzing the role of AI across various marketing dimensions, particularly:

- **Data Analysis and Decision-Making:** AI enables the rapid and accurate analysis of large volumes of data, allowing companies to make data-driven marketing decisions and gain deeper insights into consumer behavior.
- **Content Personalization:** AI facilitates the creation of personalized marketing campaigns by tracking customer preferences and delivering tailored offers that meet individual needs, thereby increasing brand loyalty.
- **Marketing Process Automation:** AI is used to automate routine tasks such as sending marketing emails and managing digital advertising campaigns, saving time and resources.

The study concluded that AI has become a vital tool for enhancing marketing performance. The researchers emphasized the importance of integrating AI

technologies into marketing strategies to maintain competitiveness in the modern business environment.

11.Chaffey and Smith's Study (2022) titled: "Excellence in Digital Marketing: Planning, Optimization, and Integrating Online Marketing":

This study addressed the foundations and practices of effective digital marketing, focusing on how to plan, optimize, and integrate marketing campaigns to achieve strategic goals. The researchers provided a practical framework to help companies leverage digital technology to enhance marketing performance. Key points from the study include:

- **Strategic Planning for Digital Marketing:** The study emphasized the importance of developing clear digital marketing plans aligned with organizational goals, identifying target audiences, and selecting appropriate digital channels.
- **Performance Optimization:** The researchers highlighted the importance of continuous data analysis and performance evaluation, using AI tools to analyze consumer behavior and predict their needs to improve customer experiences.
- **Digital Channel Integration:** The study stressed the necessity of integrating various digital tools (such as social media, email marketing, and search engine optimization) to deliver a consistent user experience and increase marketing campaign efficiency.

The study concluded that effective digital marketing requires precise planning, continuous analysis, and the use of advanced AI technologies to optimize performance and provide a seamless customer experience, thereby enhancing competitiveness in the digital marketplace.

12.Huang and Rust's Study (2020) titled: "Engaged with a Robot? The Role of AI in Services":

This study explores the role of artificial intelligence (AI) in the service sector and its impact on customer interaction and experiences. The researchers developed an analytical framework that identifies how AI can improve service quality and enhance customer satisfaction through three main levels:

- **Mechanical AI:** Involves routine and repetitive tasks such as chatbots and automated response systems, which help streamline processes and improve operational efficiency.
- **Analytical AI:** Focuses on analyzing big data and using algorithms to predict customer behavior and deliver personalized services, enhancing decision-making accuracy.
- **Emotional AI:** Emphasizes simulating human interaction using AI technologies to understand and respond to customer emotions, creating a more human-like customer experience.

The study concluded that integrating AI in services enhances customer loyalty and trust by improving response speed and delivering personalized experiences. It also highlighted that the success of AI in the service sector depends on balancing technology with human interaction to ensure a seamless and satisfying customer experience.

13.Kaplan and Haenlein's Study (2020) titled: "Rulers of the World, Unite! Challenges and Opportunities of Artificial Intelligence":

This study discusses the challenges and opportunities associated with AI applications across various fields, with a particular focus on the business and marketing environments. The researchers highlight how AI can be leveraged to

enhance efficiency and improve customer experience while addressing the obstacles companies face during implementation.

The study outlined key opportunities offered by AI, including:

- **Improved Decision-Making:** AI enhances decision-making by analyzing big data and providing accurate predictive insights.
- **Enhanced Customer Experience:** AI facilitates intelligent interactions and delivers personalized services based on customer needs and behaviors.
- **Operational Efficiency:** AI automates repetitive tasks, reducing employee workload and improving overall operational efficiency.

Conversely, the study also discussed major challenges associated with adopting AI, such as:

- **Ethical Issues:** Concerns surrounding data privacy and transparency in decision-making processes.
- **Technical Constraints:** The need for advanced infrastructure and specialized human resources to implement AI effectively.
- **Social Concerns:** Fears regarding job displacement due to the increasing reliance on AI-driven processes.

The study concluded that successful AI implementation requires balancing technological advancement with ethical considerations. It emphasized the importance of developing comprehensive strategies to ensure responsible AI use while maximizing its potential benefits.

14. **Wirth's Study (2020) titled: "Hello Marketing, How Can AI Help You?":**

This study explores the role of artificial intelligence (AI) in supporting marketing activities and how it contributes to improving performance and enhancing marketing strategies. The researcher focuses on the practical applications of AI across various aspects of marketing, highlighting how these technologies can be leveraged to achieve more precise and efficient marketing objectives.

The study identified several areas where AI can drive transformative change, including:

- **Big Data Analysis:** AI can process vast amounts of data quickly and accurately, enabling companies to derive deep insights into consumer behavior and market trends.
- **Personalized Marketing:** AI allows companies to design tailored marketing campaigns targeting customers based on their preferences and purchasing behaviors.
- **Marketing Process Automation:** AI automates routine tasks such as sending marketing messages, managing advertising campaigns, and analyzing performance, saving time and resources.
- **Predicting Future Behavior:** Through predictive analytics, AI helps companies anticipate future customer needs and develop proactive strategies to meet those needs.

The study concluded that AI has become a vital tool for improving marketing performance and enhancing companies' ability to make data-driven decisions. It also emphasized the importance of adopting clear strategies to effectively

integrate AI with traditional marketing practices to maximize the benefits of this technology.

15.PwC Report (2020) titled: "AI Predictions: The Impact of Artificial Intelligence on the Global Economy":

This report examines the global economic impact of artificial intelligence (AI), focusing on the opportunities and challenges faced by various sectors as a result of adopting this advanced technology.

The report indicates that AI is expected to contribute approximately \$15.7 trillion to the global economy by 2030, making it one of the most significant drivers of future economic growth.

Key areas addressed in the report include:

- **Enhancing Productivity:** The report predicts that AI will improve operational efficiency by automating tasks and streamlining processes, leading to increased productivity and reduced costs across industries.
- **Improving Customer Experience:** Through big data analysis, AI can deliver personalized customer experiences, which enhances customer loyalty and increases revenue.
- **Innovation in Business Models:** AI offers new opportunities to develop innovative products and services, enabling companies to reshape their business models to align with digital transformation.
- **Economic Disparity:** Despite the economic benefits, the report warns of widening gaps between advanced and developing economies, as leveraging AI requires significant investments in digital infrastructure.
- **Impact on the Labor Market:** AI may lead to the displacement of certain traditional jobs due to automation, but it will also create new employment opportunities requiring advanced skills.

The report concludes that AI represents a strategic opportunity to drive economic growth, but it requires careful planning to address related challenges such as ethics, privacy, and workforce reskilling.

Future Trends in AI Applications in Marketing:

Studies suggest that the future holds significant opportunities for developing AI applications in the marketing domain. Saura and Ribeiro-Soriano predict that the increased role of AI in branding will lead to improved supply chain management and the development of strategic partnerships. Furthermore, advances in business analytics open avenues for achieving hyper-customization, dynamically adapting to consumer behavior.

Additionally, research emphasizes the importance of developing ethical and transparent AI, which can enhance digital security through the integration of AI with technologies like blockchain. This integration offers greater protection for customer data and increases the accessibility of AI solutions for SMEs.

Similarities and Differences Between Our Study and Previous Studies

Similarities:

1. Focus on AI in Marketing:

Our study aligns with several previous studies in focusing on the impact of AI applications on improving the effectiveness of marketing campaigns. For instance, studies by Rust & Huang (2021) and Davenport et al. (2020) discussed how AI is used for data analysis and customer targeting improvement.

2. Campaign Effectiveness Analysis:

Our research agrees with studies such as Jarek & Mazurek (2019) and Kietzmann et al. (2020) in analyzing how AI enhances marketing campaign effectiveness through personalization and predictive analytics.

3. Ethical and Technical Challenges:

Like studies by Chaffey & Smith (2022) and Dwivedi et al. (2020), our study discusses the challenges associated with AI adoption, such as privacy risks and high costs.

4. Measurable Benefits:

Our study is consistent with research by Kumar et al. (2020) and Shankar & Yadav (2020) in analyzing the tangible benefits of AI adoption, such as increased return on investment (ROI) and improved customer experience.

Differences:

1. Focus on the Saudi Context:

A distinguishing feature of our study is its focus on the technology sector in Saudi Arabia, an area that has not been adequately covered by previous studies. Most prior research has focused on global or regional contexts, such as Europe and North America.

2. Case Study of the Technology Sector:

Our study provides an in-depth analysis of AI's impact on the technology sector, differentiating it from previous studies that examined various industries or generalized marketing practices without specifying a particular sector.

3. Practical Applications Focus:

While many previous studies have focused on the theoretical aspects of AI, our study offers practical insights through a real-world case study, helping to bridge the gap between theory and practice.

4. Comprehensive Analysis of Challenges and Opportunities:

Our study offers a comprehensive analysis of the challenges and opportunities associated with AI adoption in marketing, including practical recommendations for companies within the Saudi context. This practical perspective differentiates our work from other studies that predominantly focus on theoretical frameworks.

5. Future Trends:

Our study includes an analysis of emerging and future AI trends in marketing, specifically within the Saudi technology sector, a dimension that has not been sufficiently explored in previous research.

What Distinguishes Our Study from Previous Studies

1. Focus on the Saudi Context:

Our study is distinguished by its focus on Saudi Arabia, an emerging and rapidly growing market in adopting advanced technologies like AI. This focus provides new insights into how AI is applied in a unique marketing environment that differs from the Western contexts emphasized in most previous studies.

2. Case Study of the Technology Sector:

Our study offers an in-depth analysis of AI's impact on the technology sector, a vital and rapidly evolving industry in Saudi Arabia. This specialization sets our

research apart from previous studies, which often addressed different sectors or focused on marketing in general without specifying a particular industry.

3. Bridging Theory and Practice:

While many previous studies concentrated on the theoretical aspects of AI, our research provides practical insights through a real-world case study of tech companies in Saudi Arabia. This practical approach helps bridge the gap between theoretical knowledge and practical application.

4. Comprehensive Analysis of Challenges and Opportunities:

Our study presents a thorough analysis of the challenges and opportunities related to AI adoption in marketing, offering practical recommendations for companies operating within the Saudi context. This practical perspective distinguishes our work from previous studies that focused more heavily on theoretical dimensions.

5. Emphasis on Future Trends:

Our research includes an analysis of emerging and future AI trends in marketing, particularly within the Saudi technology sector. This forward-looking perspective differentiates our study from previous research that primarily concentrated on the current state of AI applications.

6. Localized Insights for the Saudi Market:

Our study provides tailored recommendations and insights specific to the Saudi market, making it more relevant for local companies seeking to adopt AI in their marketing strategies. This localized approach sets our research apart from previous studies, which often focused on global or different regional contexts.

7. Analysis of AI's Impact on Campaign Effectiveness:

Our research specifically measures the impact of AI on marketing campaign effectiveness—an area that has not been sufficiently addressed in prior studies. This focus offers new insights into how AI can improve return on investment (ROI) through advanced marketing practices.

8. Attention to Ethical and Regulatory Challenges:

Our study provides an in-depth analysis of the ethical and regulatory challenges associated with AI adoption in marketing, along with practical recommendations to ensure compliance with local and international regulations. This focus differentiates our work from previous studies, which have not adequately addressed these critical issues.

Research Gap:

Despite the significant advancements in marketing driven by Artificial Intelligence (AI) applications, which have led to a transformative shift in managing marketing operations and improving campaign effectiveness, several research gaps remain underexplored and insufficiently addressed in both academic and practical literature.

Firstly, insufficient attention has been given to the interaction between AI and other innovative technologies such as Blockchain and the Internet of Things (IoT). These technologies can greatly enhance the security and efficiency of marketing operations, especially in areas like supply chain tracking, ensuring data transparency, and improving customer experiences. However, further research is required to understand how these technologies can be integrated with AI to maximize their potential.

Secondly, although significant progress has been made in developing AI solutions, the available solutions for integrated enterprise-level implementation remain underexplored. Additionally, these solutions are often unaffordable for small and medium-sized enterprises (SMEs), limiting their ability to adopt and benefit from AI. There is a need for more studies focusing on developing scalable and cost-effective AI solutions that cater to businesses of various sizes.

Thirdly, the long-term impact of Machine Learning (ML) on brand marketing trends and consumer preferences remains limited. While AI is widely used for predictive data analysis, further research is needed to understand how these technologies affect brand awareness and customer loyalty over time.

Fourthly, issues related to data privacy and algorithmic bias still lack clear and specific guidelines in the marketing domain. Although these concerns have been discussed broadly, further research is required to develop a comprehensive framework that ensures the ethical and transparent use of AI while preserving customer privacy and minimizing bias in decision-making processes.

Fifthly, there is a lack of research on the regional and cultural variations in AI implementation. For example, the impact of AI on marketing may differ between emerging and developed markets due to differences in technological infrastructure and consumer culture. More studies focusing on local and regional contexts are required to understand how AI applications can be adapted to these differences effectively.

Finally, the impact of Emotional AI or interactive AI on a personal level remains underexplored. These technologies, which aim to understand customer emotions and interact with them on a personal level, have the potential to significantly enhance customer experiences. However, further research is

needed to understand how to effectively implement these technologies in marketing while considering ethical and social implications.

In conclusion, addressing these research gaps—either partially or fully—is essential to realizing the full potential of AI in marketing. By tackling these issues, researchers and practitioners can develop more effective and sustainable marketing strategies while ensuring the ethical and responsible use of AI technologies.

Theoretical Foundation

Theoretical Foundation

This section presents a comprehensive theoretical framework based on a collection of modern theories and research frameworks that contribute to understanding the impact of Artificial Intelligence (AI) on the effectiveness of marketing campaigns, particularly in the technology sector. The study draws on well-established theories in resource management, technology acceptance, consumer behavior, and innovation diffusion, as well as contemporary frameworks like big data analytics and dynamic capabilities. It also considers ethical and privacy aspects, providing a holistic view of AI's role in transforming marketing strategies.

1. Resource-Based View (RBV):

The Resource-Based View (RBV) posits that a firm's competitive advantage relies on valuable, rare, inimitable, and non-substitutable resources. In the context of AI, technologies such as machine learning, predictive analytics, and automation tools are considered strategic assets that enable companies to effectively analyze large datasets, enhancing their ability to optimize marketing

campaigns and deliver highly personalized customer experiences. According to this theory, AI is a strategic asset that drives marketing innovation and efficiency, supporting hypotheses H2 (AI improves decision-making) and H3 (AI increases return on investment).

2. Technology Acceptance Model (TAM):

The Technology Acceptance Model (TAM) explains the factors influencing the adoption of new technologies, with perceived usefulness and ease of use being the primary determinants. In the context of AI, studies indicate that the perceived value and ease of use of AI technologies directly affect organizations' willingness to adopt them. This theory supports the analysis of barriers to AI adoption (H4) and underscores the importance of training and education to facilitate AI acceptance (H5).

3. Consumer Behavior Theories:

The study draws on consumer behavior theories, particularly the Theory of Planned Behavior (TPB), to understand how AI-driven personalization and targeted marketing influence consumer trust, satisfaction, and purchasing behavior. AI tools such as recommendation systems, sentiment analysis, and behavioral prediction models are used to gain deeper insights into consumer preferences and develop more effective marketing strategies. This theory supports hypotheses H1 (AI enhances customer engagement and satisfaction) and H6 (AI facilitates innovation in marketing management through personalization).

4. Innovation Diffusion Theory (IDT):

Innovation Diffusion Theory (IDT) examines how new technologies spread across different sectors based on factors like relative advantage, compatibility,

and trialability. In the context of AI, this theory aids in understanding the diffusion of AI technologies within the Saudi technology sector and assessing the readiness of companies to adopt these innovations. It supports the investigation of emerging marketing trends (H6) and evaluates the preparedness of the industry for AI-driven transformation.

5. Big Data and Analytics Frameworks:

Big data analytics is a core component of modern marketing, where AI processes vast amounts of data to extract actionable insights. This framework relies on the five Vs of big data: Volume, Variety, Velocity, Veracity, and Value. It bridges the gap between raw data and predictive, personalized marketing. This framework supports hypothesis H2 (AI-driven analytics enhances marketing decision-making and efficiency).

6. Dynamic Capabilities Theory:

The Dynamic Capabilities Theory suggests that an organization's ability to adapt to rapid market changes is crucial for maintaining a competitive edge. AI enhances firms' capacity to analyze real-time customer behavior, dynamically optimize marketing campaigns, and increase responsiveness to market changes. This theory aligns with the study's objective to understand how AI improves marketing adaptability and competitiveness.

7. Ethical and Privacy Considerations:

This theory addresses the ethical implications of AI in marketing, including data privacy concerns, algorithmic bias, and the need for transparency. Guidelines on responsible AI use and compliance with regulations such as GDPR help mitigate these risks. This theory supports hypothesis H4 (ethical and privacy

concerns as barriers to AI adoption) and emphasizes the importance of ethical AI use in marketing.

8. Relationship Marketing Theory:

Relationship Marketing Theory emphasizes building long-term customer relationships through trust, effective communication, and personalization. AI-powered tools, such as chatbots and customer relationship management (CRM) systems, facilitate personalized, real-time customer interactions, enhancing customer loyalty and satisfaction. This theory supports hypothesis H1 (AI-driven marketing enhances customer engagement and satisfaction).

9. Systems Theory in Marketing:

Systems Theory views marketing as a complex system comprising interconnected components. AI-driven CRM systems, predictive analytics, and omnichannel marketing platforms facilitate the seamless integration of marketing functions across digital touchpoints, including social media, e-commerce, and customer databases. This theory supports hypothesis H2 (AI improves marketing efficiency and coordination).

Chapter 3 Methodology

Introduction:

This chapter aims to clarify the research methodology adopted in this study, presenting the scientific approach used to collect and analyze data to ensure accurate and reliable results. This section will explain the type of study (descriptive, analytical, experimental, or others) and the data collection tools used, such as questionnaires, interviews, or document analysis, in addition to identifying the study population and sample. The procedures for data analysis and the statistical methods used to test research hypotheses will also be explained.

This chapter aims to provide a clear vision of how the research was conducted regarding AI applications in marketing management, contributing to achieving the research objectives and reaching meaningful scientific conclusions.

Methodology and Research Methods

This research relies on the descriptive-analytical approach, where the phenomenon under study-the impact of AI applications on marketing management-is described and analyzed through a case study of the technology sector in Saudi Arabia. This methodology involves gathering and analyzing information to derive objective scientific results that contribute to advancing knowledge on the role AI applications play in improving the efficiency of marketing campaigns.

Research Population

The study population consists of employees working in marketing and data departments in technology sector companies in Saudi Arabia, along with experts and specialists in AI applications used in marketing. A stratified random sampling method was used to ensure comprehensive representation of various categories within the research population. The sample size was 40 participants, and questionnaires were distributed to collect data regarding the level of AI adoption and its impact on marketing campaign efficiency.

Data Collection Tools

The primary data collection tool used in this study is the questionnaire, due to its ability to provide quantitative information suitable for statistical analysis. The questionnaire was designed to cover several aspects related to the research topic, including:

- The extent of AI application usage in marketing management.
- The impact of AI on improving marketing campaign efficiency.
- Challenges faced when implementing AI in the marketing field.
- Potential benefits of using AI in marketing strategies.

The questionnaire was designed using a five-point Likert scale (from 1 = Strongly Disagree to 5 = Strongly Agree) to measure participants' attitudes and opinions on various research aspects.

Research Boundaries

1. Subject Boundaries

This study focuses on the impact of AI applications on marketing management efficiency, particularly in enhancing customer targeting, content personalization, improving customer experience, and increasing the efficiency of marketing campaigns. The study does not address AI applications in other areas outside the marketing scope.

2. Spatial Boundaries

The study was conducted on technology sector companies in Saudi Arabia, given their prominent role in adopting modern technologies, with a focus on marketing and data departments.

3. Temporal Boundaries

The study focuses on data from the period 2020 to 2024, aiming to analyze the impact of AI applications during these years, especially in light of Saudi Arabia's Vision 2030 digital transformation initiative.

4. Methodological Boundaries

The study adopts a descriptive-analytical methodology, utilizing data analysis related to AI applications in marketing management, along with surveying the opinions of marketing employees and AI experts. Statistical analysis will also be used to measure the extent to which these applications achieve their marketing and strategic objectives.

Chapter 4

Results and Recommendations

1. Introduction

This chapter analyzes the data derived from the study and presents the key findings, interpreting and linking them to the theoretical framework and previous studies. The results are presented systematically and scientifically, supported by tables and charts where necessary, to facilitate understanding and draw practical implications.

This chapter also discusses the extent to which the research objectives have been achieved and whether the formulated hypotheses have been confirmed. Additionally, a set of recommendations based on the findings will be provided, which can help companies, especially those in the technology sector, improve their marketing management strategies by effectively adopting artificial intelligence (AI) applications. Future research areas related to AI development in marketing will also be suggested.

2. Data Analysis

Variable		Frequency	Percentage
Gender	Male	34	85%
	Female	6	15%
Age	Under 30 years	14	35%
	30 - 39 years	11	27.5%
	40 - 49 years	4	10%
	50 years and above	11	27.5%
Educational Level	High School	11	27.5%

	Bachelor's Degree	22	55%
	Postgraduate Studies	7	17.5%
Years of Experience in Marketing or Data Analysis	Less than 3 years	15	37.5%
	3 - 5 years	6	15%
	6 - 10 years	8	20%
	More than 10 years	11	27.5%

Analysis of Demographic and Professional Variables:

- **Gender Distribution:** The results indicate that 85% of the participants are male (340 individuals), while 15% are female (60 individuals). This distribution suggests male dominance in the marketing and data analysis sector in technology companies in Saudi Arabia.
- **Age Distribution:**
 - Participants under 30 years old represent 35%, reflecting a significant presence of young professionals in the field.
 - Participants aged 30-39 years account for 27.5%, indicating a substantial proportion with medium-level experience.
 - Participants aged 40-49 years represent 10%, a relatively lower proportion.
 - Participants aged 50 years and above constitute 27.5%, reflecting the presence of highly experienced professionals in the field.

- **Educational Level Distribution:**

- High school graduates make up 27.5% of the participants.
- Bachelor's degree holders form the majority at 55%.
- Postgraduate degree holders account for 17.5%.

- **Experience Distribution:**

- Participants with less than 3 years of experience represent 37.5%.
- Those with 3-5 years of experience account for 15%.
- Participants with 6-10 years of experience represent 20%.
- Those with more than 10 years of experience account for 27.5%.

This distribution suggests a balanced mix of employees with both short and long-term experience, offering diverse perspectives on the impact of AI applications on marketing management.

3. Study Variables Analysis

Statement	Agree	Neutral	Disagree	Mean	Standard Deviation
1. AI applications contribute to improving customer targeting accuracy.	38	2	0	2.95	0.22
2. AI applications assist in personalizing marketing content.	38	2	0	2.95	0.22
3. AI applications improve the efficiency of marketing campaigns.	37	3	0	2.93	0.27

4. AI applications reduce marketing operation costs.	39	1	0	2.98	0.16
5. AI applications provide greater flexibility in analyzing customer data.	37	3	0	2.93	0.27

Results Analysis:

The data indicates that most participants agree that AI applications play a positive role in improving customer targeting and content personalization.

- 93% of participants acknowledged that AI applications enhance the efficiency of marketing campaigns.
- 98% of participants confirmed that AI applications reduce operational costs by improving marketing processes.

4. Conclusion

The study findings indicate that AI applications are a vital tool for improving marketing management in technology sector companies. The results highlight several positive aspects, including:

- Enhancing the accuracy of customer targeting and content personalization.
- Improving the efficiency of marketing campaigns.
- Reducing operational costs and increasing flexibility in data analysis.

Axis Two: The Role of AI Applications in Enhancing Marketing Management Efficiency

The results of this axis indicate a strong consensus on the positive role of AI applications in enhancing marketing management efficiency. All statements received high mean scores ranging from (2.93 - 2.98), reflecting participants' satisfaction with the effectiveness of these applications:

- **The highest-rated statement** was "AI applications contribute to improving the accuracy of marketing data analysis" with a mean of (2.98) and a low standard deviation (0.16), indicating a broad agreement on the importance of AI in enhancing analysis quality.
- **Conversely**, the statements "AI applications provide flexibility in dealing with market changes" and "AI helps improve customer experience" were rated the lowest, with a mean of (2.93) and a standard deviation of (0.27), which may indicate challenges in achieving full flexibility and enhancing customer experience.

Axis Three: International Practices in Using AI to Improve Marketing Management

Statement	Agree	Neutral	Disagree	Mean Score	Standard Deviation
My organization relies on globally recognized AI models to improve marketing	39	1	0	2.98	0.16

There is awareness of the importance of AI based on successful international experiences	37	3	0	2.93	0.27
My organization benefits from best international practices in AI application	38	2	0	2.95	0.22

These results reflect participants' awareness of the importance of leveraging international practices to improve marketing management using AI. The statement "My organization relies on globally recognized AI models" received the highest rating (2.98), indicating clear benefits from global expertise.

Axis Four: Challenges Facing Organizations in Adopting AI in Marketing Management

Statement	Agree	Neutral	Disagree	Mean Score	Standard Deviation
The organization faces difficulty integrating AI applications with existing systems	36	3	1	2.88	0.40
My organization lacks the technical skills necessary to implement AI	31	9	0	2.78	0.42
The organization lacks sufficient financial	19	14	7	2.30	0.76

resources to support AI applications					
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These findings indicate that organizations face several challenges in implementing AI, with the most prominent being a lack of financial resources (2.30), followed by a shortage of technical skills (2.78).

Open-Ended Responses Analysis

1. In your opinion, what are the main benefits your organization has gained from applying AI in marketing management?

- Improved accuracy in data analysis and understanding customer behavior.
- Accelerated decision-making processes based on precise analytics.
- Time and effort savings through the automation of repetitive marketing tasks.

2. What other challenges do you think hinder the implementation of AI?

- Lack of training and technical skills among staff.
- Resistance to change within the organization.
- Complexity of integrating AI technologies with existing systems.

3. Do you have any suggestions to improve the effectiveness of AI in marketing management?

- Invest in employee training on AI skills.
- Enhance integration between AI systems and digital infrastructure.
- Develop clear strategies for implementing AI in marketing processes.

Findings

- The results confirm that AI applications significantly contribute to improving marketing management efficiency.
- Organizations adopt leading international practices in AI application, enhancing performance quality.
- Implementing AI faces challenges such as a lack of skills and financial resources.

Recommendations

- Provide intensive training programs for employees on AI applications.
- Develop integrated systems that support AI in marketing processes.
- Promote an organizational culture that embraces technological innovation.
- Regularly review AI strategies to ensure marketing objectives are met.

References:

1. Ahmed, G., Hamadneh, S., Zakarneh, B., & Ahmed, G. (2024). Artificial intelligence in identifying market opportunities: Revolutionizing entrepreneurial strategy and innovation. *Proceedings of the International Conference on Cyber Resilience and Data Security*.
2. Akter, S., Babu, M. M., Hani, U., & Sultana, S. (2024). Unleashing the power of artificial intelligence for climate action in industrial markets. *Industrial Marketing Management*, 55(2), 112–128.
3. Chaffey, D., & Smith, P. R. (2022). *Digital marketing excellence: Planning, optimizing, and integrating online marketing*. Routledge.
4. Chintalapati, S., & Pandey, S. K. (2022). Artificial intelligence in marketing: A systematic literature review. *Journal of Market Research*.
5. Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, 48(1), 24–42.
6. Farayola, O. A., Abdul, A. A., & Irabor, B. O. (2023). Innovative business models driven by AI technologies: A review. *Computer Science & IT Research Journal*, 3(2), 45–67.
7. Haleem, A., Javaid, M., Qadri, M. A., & Singh, R. P. (2022). Artificial intelligence (AI) applications for marketing: A literature-based study. *Journal of Intelligent Marketing*.
8. Haque, A., Akther, N., Khan, I., Agarwal, K., & Uddin, N. (2024). Artificial intelligence in retail marketing: Research agenda based on bibliometric reflection and content analysis (2000–2023). *Informatics*.
9. Huang, M. H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*.

10. Jarek, K., & Mazurek, G. (2019). Marketing and artificial intelligence. *Central European Business Review*, 8(2), 46–55.
11. Mustak, M., Salminen, J., Plé, L., & Wirtz, J. (2021). Artificial intelligence in marketing: Topic modeling, scientometric analysis, and research agenda. *Journal of Business Research*.
12. McKinsey & Company (2023). The State of AI in Marketing: Trends and ROI Impact. Retrieved from www.mckinsey.com
13. PwC (2023). AI in Marketing: Economic Impact and Industry Adoption. Retrieved from www.pwc.com
14. Rust, R. T., & Huang, M. H. (2021). The AI revolution in marketing. *Journal of Marketing*, 85(1), 24–41.
15. Rusthollikarhu, S., Toukola, S., & Aarikka-Stenroos, L. (2022). Managing B2B customer journeys in the digital era: Four management activities with artificial intelligence-empowered tools. *Industrial Marketing Management*.
16. Saura, J. R., & Ribeiro-Soriano, D. (2021). Setting B2B digital marketing in AI-based CRMs: A review and directions for future research. *Journal of Industrial Marketing Management*.
17. Saura, J. R., Palos-Sanchez, P. R., & Grilo, A. (2021). Digital marketing tools and AI: Opportunities and challenges. *Technological Forecasting and Social Change*.
18. Verma, S., Sharma, R., Deb, S., & Maitra, D. (2021). Artificial intelligence in marketing: Systematic review and future research directions. *International Journal of Information Management*.
19. Vlačić, B., Corbo, L., Silva, S. C., & Dabić, M. (2021). The evolving role of artificial intelligence in marketing: A review and research agenda. *Journal of Business Research*.

20. Wang, P., Li, K., Du, Q., & Wang, J. (2024). Customer experience in AI-enabled products: Scale development and validation. *Journal of Retailing and Consumer Services*.
21. Rust, R. T., & Huang, M. H. (2021). The AI Revolution in Marketing. *Journal of Marketing*, 85(1), 22-41.
22. PwC. (2023). AI Predictions: The Impact of Artificial Intelligence on the Global Economy.
23. Davenport, T. H., Ronanki, R., & Loucks, J. (2020). Artificial Intelligence for the Real World. *Harvard Business Review*.
24. Jarek, K., & Mazurek, G. (2019). Marketing and Artificial Intelligence. *Central European Business Review*, 8(2), 46-55.
25. Rust, R. T., & Huang, M. H. (2021). The AI Revolution in Marketing. *Journal of Marketing*, 85(1), 22-41.
26. Davenport, T. H., Ronanki, R., & Loucks, J. (2020). Artificial Intelligence for the Real World. *Harvard Business Review*.
27. Jarek, K., & Mazurek, G. (2019). Marketing and Artificial Intelligence. *Central European Business Review*, 8(2), 46-55.
28. Chaffey, D., & Smith, P. R. (2022). *Digital Marketing Excellence: Planning, Optimizing, and Integrating Online Marketing*. Routledge.
29. Huang, M. H., & Rust, R. T. (2020). Engaged to a Robot? The Role of AI in Service. *Journal of Service Research*, 24(1), 30-41.
30. Kaplan, S., & Haenlein, M. (2020). Rulers of the World, Unite! The Challenges and Opportunities of Artificial Intelligence. *Business Horizons*, 63(1), 37-50.
31. Wirth, N. (2020). Hello Marketing, What Can Artificial Intelligence Help You With? *International Journal of Market Research*, 62(1), 12-15.
32. PwC. (2020). AI Predictions: The Impact of Artificial Intelligence on the Global Economy.

Survey Questionnaire

Title: The Impact of Artificial Intelligence Applications in Marketing on Campaign Effectiveness: A Case Study of the Tech Sector in Saudi Arabia

Section 1: Demographic Information

1. Age:

- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55 and above

2. Gender:

- ☐ Male
- ☐ Female

3. Educational Level:

- ☐ High School
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ PhD

4. Job Position in the Technology Sector:

- ☐ Marketing Manager
- ☐ Digital Marketer
- ☐ Data Analyst

- ☐ AI Specialist

5. Years of Experience in Marketing/Technology Sector:

- ☐ Less than 1 year
- ☐ 1-3 years
- ☐ 4-6 years
- ☐ 7-10 years
- ☐ More than 10 years

Section 2: AI Tools and Technologies in Marketing

To what extent do you agree with the following statements?

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My company uses AI-powered tools (e.g., chatbots, predictive analytics) to enhance marketing efforts.	☐	☐	☐	☐	☐
AI-driven marketing tools improve customer segmentation and targeting accuracy.	☐	☐	☐	☐	☐
Predictive analytics and machine learning improve decision-making in marketing strategies.	☐	☐	☐	☐	☐

AI-based automation (e.g., chatbots, email automation) enhances marketing campaign effectiveness.	☐	☐	☐	☐	☐
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Section 3: AI and Customer Targeting & Personalization

To what extent do you agree with the following statements?

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
AI helps in personalizing marketing content based on customer preferences.	☐	☐	☐	☐	☐
AI-powered recommendations improve customer engagement.	☐	☐	☐	☐	☐
AI improves the accuracy of customer profiling and segmentation.	☐	☐	☐	☐	☐
AI-driven personalization leads to higher customer satisfaction.	☐	☐	☐	☐	☐

Section 4: AI Impact on Marketing Effectiveness

To what extent do you agree with the following statements?

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
AI enhances the overall effectiveness of marketing campaigns.	☐	☐	☐	☐	☐
AI helps optimize marketing budgets and resources efficiently.	☐	☐	☐	☐	☐
AI-driven insights contribute to better decision-making in marketing.	☐	☐	☐	☐	☐
AI-powered analytics improve return on investment (ROI) in marketing.	☐	☐	☐	☐	☐

Section 5: Challenges in AI Adoption for Marketing

To what extent do you agree with the following statements?

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The high cost of AI tools is a major challenge for marketing adoption.	☐	☐	☐	☐	☐

Lack of skilled professionals is a barrier to AI implementation in marketing.	☐	☐	☐	☐	☐
Data privacy and ethical concerns hinder AI adoption in marketing.	☐	☐	☐	☐	☐
Resistance to change in organizations affects AI integration in marketing.	☐	☐	☐	☐	☐

Section 6: Strategies for Overcoming AI Adoption Barriers

To what extent do you agree with the following statements?

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Companies should invest in AI training programs for employees.	☐	☐	☐	☐	☐
Collaboration with AI solution providers can ease the adoption process.	☐	☐	☐	☐	☐

Developing clear AI policies and guidelines helps in successful AI adoption.	☐	☐	☐	☐	☐
Government support and regulations can facilitate AI integration in marketing.	☐	☐	☐	☐	☐

Section 7: Future Trends and Applications of AI in Marketing

To what extent do you agree with the following statements?

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
AI will play an increasingly important role in marketing within the next five years.	☐	☐	☐	☐	☐
AI-driven predictive analytics will dominate future marketing strategies.	☐	☐	☐	☐	☐
AI-powered voice assistants and chatbots will become essential marketing tools.	☐	☐	☐	☐	☐

The Saudi technology sector is well-positioned to adopt AI-driven marketing solutions.	☐	☐	☐	☐	☐
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Closing Remarks

Thank you for your participation! Your responses will contribute to valuable insights into the role of AI in marketing within Saudi Arabia's technology sector.