Revolutionizing Digital Marketing through Artificial Intelligence

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Abstract: Artificial intelligence (AI) has emerged as a transformative technology in various industries, revolutionizing processes and unlocking new possibilities. In the realm of digital marketing, AI is playing an increasingly significant role, enabling marketers to enhance targeting, personalization, and efficiency. This paper explores the impact of AI on digital marketing, examining its applications, benefits, challenges, and future prospects. By analyzing case studies and industry trends, this paper aims to provide insights into how AI is reshaping the landscape of digital marketing and driving innovation in customer engagement strategies.

Keywords: Artificial Intelligence, Digital Marketing, Personalization, Targeting, Automation, Customer Engagement

Introduction:
In today's digital age, the proliferation of data and the evolution of technology have transformed the way businesses connect with consumers. Digital marketing has become an essential component of marketing strategies, enabling brands to reach and engage audiences across various online channels. With the advent of artificial intelligence (AI), marketers have gained access to advanced tools and capabilities that revolutionize the way they interact with customers. This paper explores the role of AI in revolutionizing digital marketing, examining its applications, benefits, challenges, and future implications.

Book Review and Conceptual Models:
The purpose of this chapter is to enable the reader to understand artificial intelligence and artificial intelligence concepts such as machine learning, Deep learning and digital marketing. The information collected over the past two years is of great value to today's youth. Although experts are unaware of the potential that data can provide to organizations, data is now becoming a part of the daily operations of the business world.

2.1 Artificial intelligence
Artificial intelligence research dates back to the 1950s, when Alan Turing created the famous Turing Test to determine whether a machine could think. Artificial Intelligence (AI) has played an important role in the development of many businesses and services around the world. Wichert (2020) discusses how artificial intelligence is used in quantum computing and machine learning. It helps solve difficult problems quickly (Wichert, 2020). The volume and complexity of data is increasing faster than humans can process it efficiently (Wichert, 2020). Humans often cannot solve or solve complex problems quickly, but machine learning makes this possible and faster (Wichert, 2020). Quantum computing can solve problems in seconds, a simple task (Wichert, 2020). Wichert said that the advancement of quantum information requires machine learning in artificial intelligence (Wichert, 2020). Even without a quantum computing solution, positivity will continue.

2.1.1 Machine Learning
Machine learning is a subtype of artificial intelligence that automates analysis, conceptual modeling, and enables computers to independently adapt to new settings. Mahesh (2020) stated that machine learning is used to predict the prices of products, but it has disadvantages due to many variables affecting the price (Mahesh, 2020). Advances in machine learning fall into three main categories: "supervised learning, unsupervised learning, and additive learning" (M

ahesh, 2020). Each chapter focuses on a specific area; however, this study revealed that incremental learning is the best and most effective form of machine learning in predicting prices of products.

2.2 Digital Marketing

The term "digital marketing" refers to the practice of using digital platforms such as online web pages, mobile devices, social networking sites, search engines and other related platforms to promote products and services. . Digital marketing was very popular when the internet first appeared in the 1990s. (Barron, 2022). The concept of digital marketing is equivalent to traditional marketing and is often seen as a new way for businesses to interact with customers and better understand their behavior, and Digital marketing strategies are often used together by businesses in their marketing plans and activities.

Businesses always rely on print, television and radio advertising to promote their products. Although these options are still available today, the advent of the Internet has led to a change in the way businesses communicate with their customers. This is where digital marketing comes into play as it allows interaction between both businesses and customers by connecting business with customer feedback.

Methodology:

The advantages of this article will be explained in the next section. created. This study also highlights data collection, reliability, analysis, limitations, and ethics. Data collection was based on interview questions and standardized tests.

3.1 Method

The method of this article is based on a qualitative method using one-on-one semi-structured interviews (Saunders et al., 2019). The qualitative method emphasizes what is said rather than focusing on statistics and provides more responses and a better understanding of certain issues, although the response is often lower in a convenience sample.

3.2 Data Collection

These data were created using the inductive method as stated in the study. This research was initiated out of curiosity. Inductive and qualitative are two terms used to describe research studies (Stebbins, 200

1). This is important because there is no information about artificial intelligence and its application in digital marketing. When the author realizes that a concept does not contain important information about the field being researched, he/she needs to do more research on the subject (Breyman and Bell, 2005).

3.3 Key Data

Interviewees can understand more from the research through qualitative interviews (Bryman and Bell, 2015). Additionally, being selected for an interview is considered more valuable than answering a quick question (Saunders et al., 2019). The data used in this study are primary data collected through semi-structured interviews (Bryman and Bell, 2015). The writer may prepare discussion topics while conducting the semi-structured interview. Since the interview is question-based, there is some flexibility in the answers (Bryman and Bell, 2015).

3.4 Secondary Information

According to Gauri and Grnhaug (2010), secondary information is information obtained and recorded for the reader. For example, census and public information are often included in this database. Secondary data is often used to support primary data when conducting a more comprehensive analysis. To make this article relevant, the author has chosen to review the existing literature in the chosen field. The authors define data collection as data that can be transported across time and space and examine why other factors are not the primary goal when it comes to having data (including digital data) that will be used over a long period of time. The existing literature on preliminary information in this field is an example of this literature.

3.5 Data Analysis

This document is organized around the thematic analysis process and the main implications of using thematic analysis if it makes it suitable for new researchers unfamiliar with quality analysis and therefore provides flexibility in Gender targeting. dimension data (Virginia Braun and Victoria Clarke, 2006). According to Chris Nosko and Thomas Blake (2009), the recommended step for analysis is to first define the collected data. At this stage, researchers now nee

d to understand, analyze, and begin to identify recurring patterns. Second, a thematic framework was developed using the dataset as a starting point. Although these points may arise from previously discussed points, research-

level material may lead to these points. Third, create a scale. It is the process of combining the data set with the content. Then plot the data points according to their main content (such as categories). Finally, map and communication are the final stages of analysis, which depend on the perspective of the object guiding the research.

3.6 Ethical decision making

This article demonstrates that its participants were more knowledgeable about ethics and followed the ethics guidelines outlined by Saunders et al (2016). Ethical decision making occurs during the planning and design phase of the study and is unique for each study. Additionally, although there is no one-size-fits-

all "standard" for ethics, research should strive to be consistent with ethics and practices. Some of these principles include fairness, fairness, promoting fairness, benevolence, and reviewing behavior to avoid harming participants. Additionally, researchers must respect participants' privacy, inform them of the voluntary nature of the research, and provide informed consent. Finally, the importance of the university itself in ethical matters should be taken into account in university research and thesis studies. Sanders et al (2016) confirmed that the research must comply with the guidelines set out in the university's code of ethics.

3.7 Validity and Reliability

This article examines the situations mentioned by Creswell and Poth (2013). First, the method is accurate when the findings accurately reflect the participants. Second, the legitimacy of the study is guaranteed when all participants and opinions expressed are taken into account. Third, evaluate each part of the study. Finally, reliability research is evaluated based on understanding. The following steps were taken to resolve these ideas.

• The researcher uses the word to put a period in each sentence without changing its meaning.

• Research analysis was conducted on the data obtained from all interviews conducted during the compilation.

• The research defends the claim by using relevant data.

Research:

As mentioned in the research section, this article collected information from a total of six people. Participants can be divided into two groups according to their studies. Each group has three participants. First, two different types of materials are presented. Additionally, the interview questions were categorized and classified according to their relevance to the research purposes.

4.1 Data collection

Below shows the data collection process after the framework analysis. Below is an evaluation template for both groups of participants. As explained in the Data Analysis section, structural analysis is an extension of frame analysis. This evaluation is the result of the following process.

Authors should first be familiar with the research results. Next, the author needs to choose a thematic topic. In this case, the topic is determined by interview questions.We identify and analyze useful information on this topic. This means the participant will respond. The fourth step is to divide the data into categories and subcategories based on their value and importance. Repeat previous template search for correct distribution. Eventually maps and collaborations began to guide the search. This is done by interpreting and understanding the data in a descriptive way that brings results.

4.1.1 Evaluation of the Discussion Regarding the Business Employee
1. A marketer's perspective on artificial intelligence and digital marketing.
1.1. After work.
1.1.1. Professional business. 1.1.1.1 Operation.
1.1.2. Experienced in digital marketing and automation.
1.1.2.1. Social media marketing automation.
1.1.2.2. Practical knowledge and theoretical knowledge.
1.2. years of knowledge and experience.
1.2.1. Good knowledge and many years of experience.
1.2.2. Gain experience at work.

1.3. The impact of cognitive skills on business people's responsibilities.

1.3.1. Reach people in different ways.

1.3.2. Use data to meet customer needs.

1.3.3. It is automatic for accurate positioning.

1.4. Artificial intelligence and its improvements can help in decision making.

1.4.1. Targeting and marketing campaigns.

1.4.1.1. Plan your business and develop future strategies.

1.4.1.2. Generate ideas for future events. 1.4.2. Artificial intelligence technology is used.

1.4.2.1. Google AI, machine learning products, Facebook and HubSpot.

1.4.2.2. Artificial intelligence platform integration.

1.4.3. Achieve business objectives through intelligence.

1.4.3.1. Follow sales opportunities.

1.4.3.2. Expression.

1.4.3.3. Data can be used to identify areas for improvement.

1.4.4. Expertise in business automation.

1.4.4.1. Theoretical background and technical ability.

1.4.4.2. Online technology knowledge and skills. 1.4.4.3. Flexibility and ability to integrate different types of AI and other tools. 4.1.2 Analysis of the artificial intelligence expert interview template.

2. Artificial intelligence and digital marketing expert.

2.1. He has a background in programming and project management. 2.1.1. Electrical engineering and post-industrial.

2.1.1.1. Degree in Engineering and Project Management.

2.1.2. Artificial Intelligence Perspectives and Perspectives.

2.1.2.1. Artificial intelligence is like a big brain.

2.1.2.2. Make people work better.

2.1.3. The relationship between digital marketing and intelligence.

2.1.3.1 In inbound marketing, artificial intelligence creates messages and personal experiences.

2.1.3.2. Use AI in content marketing and advertising campaigns.

2.2. Business automation skills. 2.2.1. Take a short course in common sense.

2.2.1.1. Automation platform. Examples include HubSpot and Facebook. 2.3. Knowledge of artificial intelligence, search engine optimization and machine learning

2.3.1. Gain experience at work. 2.3.2. Learn math. 2.3.3. Experience in machine learning, content marketing and social media marketing. 2.3.4. Tailor content for targeted ads. 2.3.5. Artificial intelligence in inbound marketing.

2.4. All aspects of digital marketing benefit from artificial intelligence and machine learning. 2.4.1. SEO 2.4.2. Advertising and content marketing. 2.4.3. Using Content for Business Analysis

2.5. Artificial intelligence provides long-term benefits to companies, consumers and communities.

2.5.1. Artificial intelligence is being incorporated into companies' strategies to remain competitive. 2.5.2. Learn how advertising is linked to data collection. 2.5.3. Appropriate regulations need to be put in place to manage information collected through intelligence.

Analysis and Discussion:

The next section shows a brief summary of the interview results. As mentioned in the research section, the quality of this research requires conducting a survey to analyze participants' feedback to identify common patterns (Creswell and Creswell, 2018). The name is based on similarities in participants' responses. Using the same definition as participants, results are presented to eliminate misleading information. This article has now done the necessary procedures to find the necessary data for this study and will now begin to prepare and compare these costs.

This research involves analyzing the experiences of different participants on business automation and artificial intelligence technology. This article collected information from a total of six individuals as described in the Methods section. Participants were divided into two groups, with three participants in each group, according to their professions. Both documents were primarily separated and classified according to the importance of the research objectives based on the interviews.

5.1 The concept of intellectual skills in business.

In the first part of the interview, the participants' work and background were discussed. Participants were also asked to define the characteristics of business intelligence and share their thoughts and ideas on the subject. The interview guide was designed in a way that the use of artificial intelligence in digital ma

rketing can work.

Artificial Intelligence Experts:
The document shows some changes in the decisions of their work and expertise in artificial intelligence. However, when it comes to the connection between artificial intelligence and the business world, all participants have the same reaction. All agree that the current state of intelligence is critical to business success. Additionally, the group argued that AI systems are designed in such a way that marketers are not responsible for understanding the underlying structure. Although this is useful and provides a better experience, they believe marketers need to be aware of the device's true limitations. This means they need to understand the pros and cons of the tool. They will be able to use these solutions without fear of injustice.

Participants acquired skills in other disciplines but chose to study artificial intelligence to improve their business skills. Participants said that artificial intelligence is like a brain that reaches the same points as humans, but faster and more efficiently. It is the ability of a computer or machine to perform human tasks better. From a business perspective, fraud experts said this technology has improved the business as a whole.

Participants believe that business leaders need to learn skills that will improve their business strategies.

Marketers:
Marketers have a good understanding of artificial intelligence and its application in digital marketing. For example, one participant defined artificial intelligence as a machine that uses reasoning ability and acts independently. One of the interviewees described AI as a machine that is always moving towards human intelligence. Basically transfer the ideas in your head to the computer. Therefore, with the help of artificial intelligence, we can contribute to the same thinking, discussion, reflection and real work as humans. Participants said they had little experience with technology but used a platform like Amazon for digital marketing. One participant said they are using automation with the help of AI to assist with marketing campaigns by helping clients organize employees. The general view is that there is an understanding of intelligence, but this understanding is not broad. These findings are consistent with 2017, when only 17% of 1,500 U.S. business leaders reported being knowledgeable about AI technology .

5.2 The impact of intellectual skills on the role and development of business people.
Interviews include the use of business intelligence and the role of business people. He also discusses the need for innovation and social awareness in the automation process. In the second part of the survey, business people were asked about their thoughts on the integration of intelligence into their business. "It will change everything and use all of our realities in the next 20-25 years," said one industry participant… Another participant claimed that artificial intelligence will help users by providing products and services that are useful to their business. Artificial intelligence technology is the evolution of digital business. Research shows that this technology provides many benefits, including improved communication, better understanding of customer preferences and faster delivery. Additionally, the results in this study show that rapid feedback can be obtained with the help of artificial intelligence, helping marketers improve products and ensure customer satisfaction.

The business people interviewed said that their companies integrated artificial intelligence technology into their business and this increased efficiency. According to the organization, most of the AI technologies its companies use include Google AI, machine learning, Python, AI integration, and HubSpot.

5.3 Cost of intellectual property in business.
Participants in business meetings claimed that AI helps save time and provides growth potential by encouraging learning from successful information. Marketing today requires a good understanding of your customers' needs and preferences and the ability to act quickly and effectively on this information. Most organizations that do not use business intelligence cannot make decisions based on immediate data. Beyond business automation, the most important aspect of intelligence is the relevance it can provide marketers to customers. Consumers are drowning in a sea of information and options. Personal data collection allows businesses to better understand customer behavior and interests across multiple platforms and conversational contexts, thus optimizing more satisfied

customers with relevant content and increased sale. Especially when customers are involved in all e-commerce, they have become more demanding and indifferent towards the brand thanks to the search information for purchase evaluation, review and use

5.4 Skills for using skills in business life.
Research shows that cognitive skills are not necessary. Participants viewed specific skills as secondary. They argue that the use of technology does not mean that the design of the machine will be affected. Both sides seem to agree that AI systems are designed to be used without the AI's knowledge or understanding. Therefore, according to both groups of participants, this understanding will be very useful. The results of the interviews also show that cognitive skills are important. Artificial intelligence experts say that they gain artificial intelligence skills by constantly using technology. One of the interviewees started working in his childhood and his skills have improved since then. Additionally, the use of AI technology in the business sector can improve their learning of the technology and thus increase their skills.

Conclusion:
The business sector is seen as one of the sectors with the greatest development potential in the economy. This is a particularly valid area for improvement through technological development (Fagella, 2019). Business technology continues to evolve and improve over time, including modern technologies that increase efficiency. The digital economy has the potential to create a huge impact on people (Ali and Manisha 2020), as the development of technology allows businesses to create more products and use businesses digitally to expand business opportunities to advertise and sell products to consumers (Ali and Manisha 2020)). Moreover, the development of digital marketing is the result of the combination of big data and smart research applications. Therefore all personal data and preferences are recorded for commercial use. This study aims to identify the benefits of digital marketing, specifically the use of artificial intelligence and marketing automation to improve business results. Additionally, the impact of digital marketing on company performance is also taken into consideration.

The research revealed that artificial intelligence and marketing automation have a positive impact on digital marketing. The research has seen significant developments among companies, as in all types of technology, and the findings are consistent with previous literature (Rust, 2020; Mari, 2019; Huang and Rust, 2021). Entrepreneurs have high standards and believe that artificial intelligence will continue to improve automation and automation will lead to more and more jobs. Today's marketers are interested in learning how to improve their digital marketing to reach all customers and communicate their needs.

Examining the use and impact of artificial intelligence in the digital economy can provide information about the technology and its current applications. The results of this study will provide further insight into the benefits of artificial intelligence technology and business automation in business. With the rise of international business on the internet and businesses promoting their products and services digitally, it is important to explain how intelligence can be used to market to customers and achieve business goals. The results show that artificial intelligence is a modern way of doing business and makes digital business processes effective. Marketers who use digital marketing skills show significant improvements in their marketing strategies. Therefore, it has become important for business leaders to learn AI skills to stay competitive and increase the profitability of their businesses.

The future of the business world depends on the development of technology and standards in the business world. Technical skills are expected to get the job done, create customer experience, and take the business to an incredible level. Therefore, incorporating artificial intelligence and business automation into their systems should be the desire of all business managers because these technologies are accepted worldwide. AI technology is expected to increase GDP through return on investment and therefore support economic growth. These technologies are gradually changing the human economy, such as communication, and facilitating and improving other activities. The virtual assistant model allows each customer to connect to AI in a human way. Although this development deserves great attention, it is also a fact that digital marketing is slowly changing for the better.

6.1 Impact Management.

This research shows resources that will become important for business professionals to know in the future so that they can be better prepared. To know how to use AI's capabilities, such as analyzing big data for dimensions and expectations, business professionals must have the ability to understand and evaluate this information. In addition, production value is seen as one of the main results of the profitability of business management. As one participant noted, the ability to use technology solutions to improve customer service is very good, as the customer experience has always been technology driven.

Business professionals need to understand how smart machines work and implement solutions, so they need skills. Additionally, soft skills related to skills such as social skills and thinking are often important for professionals. These skills are important for many reasons, including advising customers on product development and innovation, which requires understanding customer needs and knowing how to use voice when communicating with customers and partners. Moreover, creativity seems to be an important part of the business professional's role because it is important for good decision making as well as for the company's new and product decisions. While the importance of companies increases with the introduction of artificial intelligence into the sector, the innovation of specialized studies in the business world will continue to be an important part of the role. Additionally, business professionals should avoid relying on information as this may corrupt the original and lead to high risk. Therefore, business professionals need to strike a balance between knowledge and creativity. But creating new products will become less important as AI promises to know all aspects of the creative process.

6.2 Limitations of the Study.

I also experienced some setbacks during the research. First, this study focuses on six interviewees who may have a small impression of the real situation. Therefore, the results of this study can only be used in this context. Greater attention to data collection and use of more research methods are needed to obtain a comprehensive perspective. Although the situation is similar in other organizations, there are differences in some areas that may invalidate the results of this study. Second, time limit is another limitation of the study. Although the interviewees were interviewed over time, it is difficult to tell whether their answers were different or more accurate in different situations.

Thirdly, given the author's desire to reach as many people as possible working on artificial intelligence technology and digital marketing, it is difficult to find enough experts to discuss artificial intelligence and digital marketing and share their thoughts on this topic. Although the authors have some good practices, participants may not be motivated to participate in the study due to busy schedules or other constraints. However, writers need to be patient so that they can achieve their success goals before the deadline. Additionally, the authors recommend attending industry events that can generate additional leads for interviewees. However, due to time constraints, the author can attend only one of such events and must rely on digital methods and channels to record the discussion. However, the implementation and completion of this study provided the authors with effective time management knowledge. Without time management, it will not be possible to complete this article in a short time.

6.3 Suggestions for future research

This research analyzes the importance of artificial intelligence in digital marketing in modern companies. Look at primary and secondary data for a clear view of today's economy. However, scientific research cannot be conducted in this article. This study is open to further research. Further research can be done using different data from different regions, states, countries, or different levels of companies and businesses. Findings from other participants can be used to expand this research. Additionally, customer perception of artificial intelligence and marketing technology can be evaluated by researching different customers of digital marketing. This will provide an understanding of how technology impacts business in today's economy.

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