Artificial Intelligence as a supportive tool for digital marketing

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Abstract:

Digital marketing has evolved rapidly in recent years, with organizations striving to stay ahead in the competitive online landscape. To achieve this, businesses are increasingly turning to artificial intelligence (AI) as a supportive tool for their digital marketing strategies. This paper aims to explore the role of AI in enhancing digital marketing efforts and its potential as a game-changer in the field. The descriptive research method was used in this study since it describes the two concepts of Artificial Intelligence (AI) and digital marketing and the relationship between them. The findings of this research show that information received from AI should be used in the correct way, clearly identifying and knowing what content customers want to receive from the brand, is going to have a positive impact on the business in general.

Keywords: Artificial Intelligence (AI); digital marketing; information.

JEL Classification Codes: O33,M31.

1. INTRODUCTION

Nowadays, the technology progress has given the opportunity to industries to provide people with huge amounts of products. Digital marketing uses channels like internet to open new avenues for industries to advertise and sell their products to customers. Digital marketing includes all the methods that can create a massive impact on people at certain time, at certain place and through certain channel (Smith, 2011). Digital marketing industrial progress is an outcome of combining big data and academic scientific research on intelligent systems.

In the last decade the use and potential of AI has grown tremendously and is changing business practice, especially in digital marketing. It has become necessary to integrate AI into business practices because of the emergence of big data and advances in computing power (Kaplan & Haenlein, 2019). AI has enabled organizations to better understand their customers and effectively target them with personalized digital messages. Extant literature has lauded the benefits of AI for customers, describing digital technologies that offer new and superior products, or services that meet or exceed customer expectations. However, there is a lack of understanding in terms of the depth of AI use and its application in the digital marketing sphere. Though there are researches done to explain the importance and growth of AI in the field of marketing, much needs to be revealed and explained about the application of AI in terms of end use in the digital marketing field.

The purpose of this research paper is to highlight the components of digital marketing techniques in scientific research to optimize its performance through artificial intelligence (AI) methods. Also, it addresses how AI reshapes digital marketing, along with AI's impact on the interactions between digital marketing and customers.

2. Theoretical background

In order to define the key role of artificial intelligence (AI) on digital marketing we must map the current situation of digital marketing and AI in scientific research.

2.1 Digital Marketing: A boon for Marketers

With the explosion of digital technology—including widespread and pervasive use of computers and smartphones businesses began to experiment with new marketing tactics. Thus, digital marketing was born.

2.1.1. Definition of the concept digital marketing

Digital marketing is defined as to any marketing methods conducted through electronic devices which utilize some form of a computer. This includes online marketing efforts conducted on the internet. In the process of conducting digital marketing, a business might leverage websites, search engines, blogs, social media, video, email and similar channels to reach customers (Smith, 2011).

According to Barone (2020) digital marketing refers to the use of Internet, mobile

devices, social media, search engines, and other channels to reach consumers.

Some marketing experts consider digital marketing to be an entirely new endeavor that requires a new way of approaching customers and new ways of understanding how customers behave compared to traditional marketing.

Internet marketing differs from digital marketing. Internet marketing is advertising that is solely on the Internet, whereas digital marketing can take place through mobile devices, on a subway platform, in a video game, or via a Smartphone app.

2.1.2. Digital marketing methods

Online sources of information are replacing newspapers magazines, catalogues., etc and digital transformation of traditional marketing activities have taken over selling and purchasing phenomenon and fulfilling the goal of marketing to nurture long term relationship . Encouraging customers to shop online is one of the most important strategies in Internet Advertising. Social media marketing, advertising on search engines, email marketing, video ads, mobile application marketing, affiliate marketing,…etc are backbones behind increasing growth of e-commerce and popularity. There are different types and methods of digital marketing which are as follow (Jerabek, 2018):

- **Search engine optimization (SEO):** If the company wants to be found on Google and the other major search engines, it will need to partner with a search engine optimization expert who can get it on the front page. Increased traffic to the company website from Google relies on a smart and savvy SEO plan that attracts the visitors to its website that will actually purchase the company's products and services.

- **Search engine marketing (SEM):** It is the process of using paid search (Pay Per Click ads) to gain website traffic, it can include search engine optimization, where websites are written and organized to get an impressive rank in a search engine for specific keywords.

- **E-mail marketing:** E-mail marketing is one of the most cost-effective types of digital marketing strategies because the company already has a database of its targeting customer. Email is often cited as the "more effective replacement" for direct mail marketing, as companies can directly reach a wide network of customers in an instant with newsletters, ads, or reminders through email.

- **Social media marketing:** Social media marketing is the use of social media platforms and websites to promote business and connect with customers. Through services like Facebook, Twitter, Instagram and youtube, businesses can engage and develop relationships with their customers, compile market research, showcase products and services and create a distinctive "brand".

- **Pay Per Click or Pay Per Call (PPC):** PPC marketing can be broken down into two main categories: paid search and paid social marketing. Ads are

published on search engines or social platforms, and companies are charged every time their ad is clicked. Search marketing encompasses display, mobile and paid social advertising.

- **Influencer marketing:** It is a form of marketing that focuses on targeting key industry leaders to drive brand message and awareness to a specific market of consumers. Influencers (individuals with a strong social following) are paid to promote the company's goods.

- **Affiliate Marketing:** Affiliate marketing is a performance based exercise that enables revenue sharing and pay-per-sale (PPS) compensation within a common network.

- **Reputation marketing:** It consists of using press releases, social media, and customer review platforms to develop a positive perception of a company. Reputation marketing involves developing a distinctive brand, encouraging customers to post reviews, and responding quickly to resolve customer concerns or complaints on social media and review platforms.

- **Video marketing:** Companies can catch the attention and emotions of their target market by showing them a video clip about the product or service.

- **Viral marketing:** Viral marketing is a type of marketing where consumers give or share information about the company's goods or services through social networks. It seeks to spread information about a product or service from person to person by word of mouth or sharing via the internet or email and to inspire individuals to share a marketing message to friends, family and other individuals to create exponential growth in the number of its recipients.

- **Mobile marketing:** Sending marketing messages through SMS and push notifications is a time-tested way of getting the recipient's attention, especially since more than 90% of such messages are opened right after receiving them (Balegar,2019).Modern geofencing options ensure that companies can target a specific demographic with precision and ease is a powerful way of influencing a customer.

2.1.3 Benefits achieved through digital marketing

Given the diversity of digital marketing methods, there is a similarly diverse set of benefits available for digitally savvy benefits. On an overarching level, digital marketing enables businesses to reach customers during everyday activities, such as scanning social media, reading online articles, watching videos, etc. When customers are exposed to marketing in this type of natural and regular manner, it can yield a variety of commercial benefits.

More specifically, digital marketing can help businesses achieve any or all of the following benefits (American Marketing Association):

- **Global reach:** Unlike traditional methods, digital marketing is not necessarily bound to a specific geographic area. The internet is available to customers across the globe. This allows businesses to market and sell to customers who live in a different state or country, removing many traditional barriers to entry.

- **Low cost of entry:** Certain aspects of digital marketing can be achieved with a small investment of time and resources. For example, even small or startup businesses can create a website, manage social media and publish blogs without breaking the bank.

- **Measurable ROI:** In order to maximize profits, businesses must carefully evaluate return on investment (ROI). With traditional marketing, ROI can be difficult, sometimes impossible, to measure. On the other hand, digital marketing provides real-time visibility into the effectiveness of each campaign, enabling business leaders to make well-informed decisions to drive revenue and increase profit.

- **Improved targeting:** Digital marketing allows businesses to target very specific demographics of potential customers. By engaging customers in a particular geography, industry or social channel, businesses have a much better chance of reaching their target demographic.

- **Dynamic adaptability:** Digital marketing strategies are extremely malleable and flexible, enabling businesses to be adjusted when needed.

- **Immediate connection:** Before making a purchase, modern customers generally conduct online research and evaluate reviews. The first step in this process typically starts with a search engine. In this way, businesses with developed SEO, SEM and PPC strategies can connect immediately with customers.

- **Relationship building:** The rise of social media has turned it into a dominant communications platform for many customer demographics. Furthermore, customers increasingly want to interact with businesses on their terms and on their preferred platform.

Overall, businesses of every shape and size can achieve powerful benefits through effective use of digital marketing methods. Furthermore, the cost of digital marketing can be tailored to each specific business, stripping many barriers to entry of traditional methods. With so many benefits available for just about any budget, it makes sense why so many businesses are succeeding with digital marketing efforts.

2.1.4 Implementing a digital marketing strategy

The process for creating and implementing a digital marketing strategy involves many steps and required considerations. In this context, it is critical to devote time and resources to planning and creation. Information, analytics and research collected while planning and creating can have a tremendous impact during implementation.

It is true that every business has unique needs and goals. Correspondingly, the creation

and implementation of a digital marketing strategy will change from business to business. But in common practice, many businesses employ a similar process for creating and implementing a digital marketing strategy, as outlined below (Alexander, 2020)

- Identify marketing goals: The first step in this process involves identifying specific goals, such as driving sales, building brand recognition or increasing subscribers.

- Solidify sales process: To maximize the benefits of digital marketing, it is necessary to understand the digital sales process and exactly how customers will make digital purchases.

- Isolate target customers: Creating a strong target demographic with refined buyer personas helps isolate the ideal customers to purchase business goods or services.

- Choose marketing channels: Armed with target demographic and buyer personas, it is important to identify the best digital marketing channels to reach those ideal customers.

- Set clear benchmarks: In order to evaluate a digital marketing strategy, it is advisable to establish clear benchmarks for success and measure progress along the way.

- Make necessary adjustments: After creating and implementing a digital marketing strategy, it is important to monitor progress toward goals and adjust as needed.

An effective digital marketing strategy must take into the account the individual needs and goals of the business in question. Digital marketing offers a wide range of methods, channels and strategies. So, businesses of just about any size and in just about any industry can leverage digital marketing to great effect.

2.2 Artificial Intelligence (AI): An overview

Artificial intelligence is a hot topic in marketing. It is considered as the next frontier of marketing. Artificial Intelligence is a broad term which has covered a wide range of different technologies.

2.2.1 Definition of Artificial Intelligence

Artificial Intelligence is an increasingly popular term that lacks a unified, concrete definition.

According to Russell and Norvig (2016) AI is that activity devoted to making machines intelligent, and intelligence is that quality that enables an entity to function appropriately and with foresight in its environment. Technically speaking, Artificial intelligence is an integration process in between cloud computing, network devices, robots, computer, and digital content production and in various business processes, systems, and daily life operations.

The concept of Artificial Intelligence refers to technology that is seeking to mimic human intelligence. Artificial Intelligence includes a broad variety of capabilities such as

voice, image recognition, machine learning and semantic searching (Gentsh, 2019). It is used to simulate human intelligence in machines, saving a lot of time and money in doing business.

Historically, four different approaches have been explored to Ai are:

- ✓ Think humanly

- ✓ Think rationally

- ✓ Act humanely

- ✓ Act rationally

Whereas AI marketing is considered as a method of leveraging intelligence technologies to collect data, customer insights, anticipate customers' next moves, and make automated decisions that impact marketing efforts. In marketing, AI is usually used in which speed is essential. AI, actually, can boost the return of investment (ROI) of marketing. With AI, marketers can understand their customers' behaviors deeply, know their actions and indications. Therefore, they can target the right strategy to the right person in a time-saving and effective way (American Marketing Association).

2.2.2 Historical Development of AI

The history of artificial intelligence can be divided into various phases. In the scope of this paper, a short overview will be given of the individual stages of development of artificial intelligence from the beginning in the 1950s to today (Shahid, 2019).

- ✓ **First works in the field of artificial intelligence (1943– 1950):** In 1943, the Americans Warren McCulloch (1898–1969) and Walter Pitts (1923–1969) published the first work dedicated to the field of AI (Russell &Norvig 2012). Based on knowledge from the disciplines neurology, mathematics and programming theory, they presented the so-called McCulloch-Pitts Neuron. They describe for the first time as an example the structure of artificial neuronal networks, the set-up and structure of which are based on the human brain. Often referred to as the "father of modern computer science," Alan Turing created the "Turing Test" in 1950 to assess whether a machine is intelligent. The British mathematician focused on formalizing the parameters on what can be computed. Despite this progress, the debate on whether devices are capable of thought and feeling has stumped computer scientists for years.

- ✓ **Early enthusiasm and speedy disillusion (1956–1966):** The term "artificial intelligence" was first coined by John McCarthy in 1956 when he held the first academic conference on the subject at Dartmouth College. The mission statement of the conference as stated by McCarthy was, "To proceed on the basis of the conjecture that every aspect of learning or any other feature of intelligence can be so precisely described that a machine can be made to simulate it." In 1959 Arthur Samuel, an American pioneer in the field of computer gaming and artificial intelligence, coined the term "Machine Learning" while at IBM. In the

early days of AI, researchers were interested in having machines learn from data. Machine learning is a division of artificial intelligence where computer algorithms are created to comprehend data automatically. As time went on, machine learning was reorganized as a separate field from artificial intelligence and started to flourish in the 1990s. ELIZA was the first tangible form of a virtual assistant. MIT professor Joseph Weizenbaum developed it at the MIT Artificial Intelligence Laboratory in 1966. The program carried out a conversation via text by following a "script" that directed it on how to respond. ELIZA marks a revolutionary turning point in the history of AI.

- ✓ **The Ascension of AI to Science (1972–1980):** In 1972 at Stanford University, work began on MYCIN, an expert computer system that used artificial intelligence to treat blood infections. The program was the first step in opening the doors for AI in the medical world. It operated at roughly the same level of competence as human specialists in blood infections, and somewhat better than general practitioners. From 1974 to 1980, an "AI Winter" occurred. This period happened when government funding and interest in artificial intelligence decreased. Financial cuts during this time resulted in technology limitations. The resulting lack of computing power slowed down the progress of AI research.

- ✓ **Intelligent agents are becoming a normality (1997 to today):** In 1997, an IBM computer, named "Deep Blue" beat world chess champion, Gary Kasparov. The computer's win after the six-game match made headlines across the world. Thus, helping a broad audience better understand the power of AI. By 2011, technology advancements in hardware and software allowed AI to enter everyday life. When Apple introduced its virtual assistant, Siri, regular consumers had access to AI right in the palm of their hands. Other Smartphone manufacturers also increased in popularity because of the inclusion of virtual assistants, Samsung Bixby for example.

Advances in AI are happening every day. Businesses and marketing departments are already adopting technology with AI capabilities. We live in an exciting time where AI is helping humans make quick, data-backed business decisions. By knowing the history of AI, marketers can make more informed decisions when evaluating social media AI capabilities

2.2.3 Types of artificial intelligence

Depending on capabilities, artificial intelligence is split into (Zhang, 2021):

1. Narrow AI, also known as Weak AI, is limited to one narrow task and operates with predefined functions. This is the case of tools like Siri, Google Translate, image recognition etc.

2. General AI or strong AI is a machine with consciousness and mind, and this machine has intelligence in more than one specific area it understands, learns and performs the same sets of tasks that human beings can. Examples of general AI include self-driving cars.

3. Last but not least, Super AI is the one that surpasses human capabilities, and which may make rational decisions, make art or develop emotional relationships all by itself. Humanity has yet to achieve artificial super intelligence, but, once it does, this will make a breakthrough in the world as we know it.

2.2.4 Role of artificial intelligence in business

Many companies and marketing teams are rapidly adopting intelligent technology solutions to encourage operational efficiency while improving the customer experience. Through these platforms, marketers are able to gain a more nuanced, comprehensive understanding of their target audiences.

Artificial Intelligence (AI) is rapidly becoming more central to the day-to-day digital world, and the marketing and advertising world is no exception. From sarcastic and brilliant Siri to Tesla's self-driving cars to Google AI, Artificial Intelligence is revolutionizing industries one by one.

The applications of Artificial Intelligence range from detecting trends in data to mitigate market risks, enhancing customer service through virtual personal assistants, or even analyzing millions of documents across company's servers to find compliance failures. But it is only recently that companies have been able to anticipate and envision the possibilities that Artificial Intelligence and robotics can bring to the future of the business world. Artificial Intelligence leverages self-learning systems by using tools like data mining, pattern recognition and natural language processing. So, in terms of its key business advantages over human intelligence, Artificial Intelligence is highly scalable, resulting in phenomenal cost savings. Besides, Artificial Intelligence's consistency and rule-based programs allow enterprises to minimize their errors. Its longevity, coupled with continuous improvements and its ability to document processes, translates into rewarding business opportunities.

3. Artificial Intelligence (AI) applied to digital marketing

Artificial Intelligence is important to gain sustainable competitive advantage in this always connected, real time world where marketers are required to deliver continuous, customized, insight driven interactions with customers on an individual basis. Artificial intelligence in marketing is not just about technology, it is about delivering the perfect combination of content with context.

3.1 Components of AI in Marketing

It's clear that artificial intelligence holds a vital role in helping marketers connect with consumers. The following components of AI marketing make up today's leading solutions that are helping to bridge the gap between the expansive amounts of customer data being collected and the actionable next steps that can be applied to future campaigns (Zhang, 2021):

- ✓ **Machine learning:** Machine learning is driven by artificial intelligence, and it involves computer algorithms that can analyze information and improve automatically through experience. Devices that leverage machine learning analyze

new information in the context of relevant historical data that can inform decisions based on what has or hasn't worked in the past.

✓ **Big data and analytics:** The emergence of digital media has brought on an influx of big data, which has provided opportunities for marketers to understand their efforts and accurately attribute value across channels. This has also led to an over saturation of data, as many marketers struggle to determine which data sets are worth collecting.

✓ **AI platform solutions:** Effective AI-powered solutions provide marketers with a central platform for managing the expansive amounts of data being collected. These platforms have the ability to derive insightful marketing intelligence into your target audience so you can make data-driven decisions about how to best reach them.

3.2 How AI is transforming digital marketing?

With the ability to collect data, analyze it, apply it and then react to it, AI is revolutionizing digital marketing. As the amount of information on potential consumers grows, AI will become more important due to its ability to make data-based decisions quickly and accurately. Here are some ways AI is changing digital marketing (Davenport et al., 2020):

a) Recognize and analyze:

Customer relationship management (CRM) refers to a business strategy that establishes a customer-centric approach to business by maximizing the collection of customer information and filtering valid information.

When CRM, AI technology and big data technology are combined, they can maximize the collection of user information from different platforms, gain accurate insights for target customers and identify users' needs so that companies can determine the most appropriate marketing strategy. The key is that any behavioral information will become the source of AI analysis. For example, the kinds of products someone buys, which pages they browse, which tools they use often, etc.

With all of this collected data, marketers can easily analyze a potential customer's needs and adapt the AI used in order to boost sales. Businesses are better able to visualize the customer journey and provide the right kind of solution, making the shopping experience easier and helping the customer reach the checkout with recommendations that better reflect them and their habits.

b) When AI combines with AR/VR:

When AI technology meets the new visual technologies such as Augmented Reality (AR) and Virtual Reality (VR), it brings a new consumption experience.

This method can also provide consumers with interesting ways of interacting with and learning about a brand, allowing them to form a connection. Combining AI with AR/VR

not only refreshes the user's consumption experience but also builds a strong brand identity that can help create a greater sense of loyalty from a brand's customer base.

3.3 Benefits of AI in Digital Marketing

AI has been changing the face of the digital landscape. Practical data analysis and the ability to adapt to dynamic input make AI identify marketing trends better. There is a myriad of use cases for AI in marketing efforts, and each of these use cases yields different benefits , which may be quantifiable (number of sales) or not quantifiable (user satisfaction). There are a few overarching benefits that can be applied across AI use cases (Olson & Levy, 2018):

- **Better understanding of the audience:** AI helps analyzing large amounts of data and predicts every customer's buying behavior/decisions. This allows marketers to effectively implement dedicated marketing campaigns to a target audience. It also helps in boosting customer satisfaction and engagement. Also, using AI-driven strategies, marketers can easily convert the lead into a sale at the best possible times to drive conversions.

- **Increased productivity:** Using AI can easily automate several repetitive tasks. This will save a lot of time and resources and increase productivity.

- Effective marketing: AI puts an end to the assumptions while marketing. You can devise a more effective digital marketing strategy using AI-driven data analysis and services.

- **Increased ROI (Return on Investment):** AI boosts decision making and helps creating better-performing content. Due to its advantages in understanding the audience better, marketers can drive targeted digital marketing campaigns, resulting in better ROI. AI is simultaneously helping businesses drive revenue and save money.

- **Improved user experience:** With AI in marketing, businesses provide the right audience with the right content. This enhances customer satisfaction as they find what they need. Reports have shown that consumers are more likely to be driven towards brands implementing AI in their marketing strategies.

- **Better customer relationships & real-time personalization:** AI can help businesses deliver personalized messages to customers at appropriate points in the consumer lifecycle. AI can also help marketers identify at risk customers and target them with information that will get them to re-engage with the brand.

- **Smarter and faster decision making:** AI helps conduct data much faster than human intervention, guarantees the accuracy, security, and enables marketing team to focus on strategic initiatives to make effective AI-powered campaigns. AI is able to collect and track real-time tactical data so that marketers can make decisions right at the moment without having to wait until the campaigns end. They can determine what to do next based on the data-driven reports so that the decisions will be smarter and more objective.

3.4 Applications of artificial intelligence in digital marketing

It's important to begin with a thorough plan when leveraging AI in marketing campaigns and operations. This will ensure marketing teams minimize costly challenges and achieve the most value from their AI investment in the least amount of time.

3.4.1 Factors applied before implementing AI digital marketing

Before implementing an AI tool for marketing campaigns, there are a few key factors to consider (Basu, P. 2020):

- ✓ **Establish Goals:** As with any marketing program, it is important that clear goals and marketing analytics are established from the outset. Start by identifying areas within campaigns or operations that AI could stand to improve, such as segmentation.

- ✓ **Data privacy standards:** At the outset of AI program, AI platform should not cross the line of acceptable data use in the name of personalization. Making sure that privacy standards are established and programmed into platforms as needed to maintain compliance and consumer trust.

- ✓ **Data quantity and sources:** In order to get started with AI marketing, marketers need to have a vast amount of data at their disposal. This is what will train the AI tool in customer preferences, external trends, and other factors that will impact the success of AI-enabled campaigns. This data can be taken from the organization's own CRM, marketing campaigns, and website data. Additionally, marketers may supplement this with second and third-party data. This can include location data, weather data, and other external factors that may contribute to a purchasing decision.

- ✓ **Acquire data science talent:** Many marketing teams lack employees with the necessary data science and AI expertise, making it difficult to work with vast amounts of data and deliver insights. To get programs off the ground, organizations should work with third party organizations that can assist in the collection and analysis of data to train AI programs and facilitate ongoing maintenance.

- ✓ **Maintain data quality:** As machine learning programs consume more data, the program will learn how to make accurate, effective decisions. However, if the data is not standardized and free of errors, the insights will not be useful and can actually cause AI programs to make decisions that hinder marketing programs. Prior to implementing AI marketing, marketing teams must coordinate with data management teams and other lines of business to establish processes for data cleansing and data maintenance.

- ✓ **Selecting an AI platform:** Selecting the right platform or platforms is a crucial step in getting an AI marketing program off the ground. Marketers should be discerning in identifying the gaps that the platform is trying to fill and select solutions based on capabilities. This will revolve around the goal marketers are

trying to achieve – for example, speed and productivity goals will require different functionality than tools used to improve overall customer satisfaction with AI.

3.4.2 AI implementation to improve digital marketing strategy

It has changed the way marketers carry out their campaigns to the way the campaigns themselves are measured and run. Artificial intelligence will define how digital marketing will be conducted now and in the future. Hence, we must understand some of the ways that we do it.

The following are the ways how AI can be used to change the world of digital marketing (Jade, 2022).

- **Predictive marketing:** It refers to an artificial intelligence (AI) technique that gathers users' behavioral data, analyzes them through data mining finding any possible data correlations including preferences and needs. It makes it easier for marketers to understand customers and participate in their actions based on the data collected on their contacts and past purchases. Through this system, it can be predicted what customers will buy next and the quantity of a product sold. It helps defining what product to promote and promote to whom to drive higher sales.

- **Personalized customer experience:** Brands can use AI to improve customer experience by offering personalized content and offers and top-notch support to each individual customer. AI is used to analyze the products customers have purchased in the past and recommends products that fit their needs. The result of a personalization campaign using AI is more sales, engagement, and customer retention.

- **Ad targeting:** It refers to sophisticated online advertisement generation techniques essential for branding. It generates or optimizes advertisements based on user's history and behavior importing factors such as geographic location, gender, age etc. for better user targeting aiming to improve the return of investment to the advertisers.

- **Content generation:** AI-powered tools can help the works of content creators much more efficiently and easily. Though the core of the content is routed from human creativity, AI tools can be used to maximize business content team's efficiency by automating specific tasks such as email content, personalized reports/messages, social media content curation, or creating fresh social media content that increases followers' engagement.

- **AI enhanced PPC (Pay-Per-Click) advertising:** AI is also used widely in PPC advertising. Researchers showed intriguing findings of the application of Artificial Intelligence in PPC from PPC gurus. Some top of AI applications in PPC are: smart bidding, micro-moment targeting, responsive ads and price optimization. These channels may not be used by competitors and thus Artificial intelligence offers a competitive advantage to advertisers. Also,

Business can be able to monitor more advertising platforms that can't be achieved by the company in-house teams and, perhaps, its competitors.

- **Chatbots:** Chatbots are extremely popular in today's marketing landscape, because they respond to a stringent consumer need: 24/7 customer support with immediate and personalized responses. AI chatbots use machine learning and natural language processing to collect input from users, learn from conversations and use these information to produce their own content and conduct conversations with consumers. Most digital marketers see chatbots as a way to provide personalized customer service at scale. However, chatbots are also used to collect feedback and to help guiding users through a customer journey to a sale.

- **Web Design :**Without the help of a programmer or a designer, businesses can still have their website through the use of Grid, that uses Artificial Intelligence to do the work for them based on the information provided like images, text, calls-to-action, etc. they can make the website look professional in much less time and at affordable price.

- **Speech Recognition:** It refers to artificial intelligence (AI) techniques for voice searches. This AI can recognize spoken words and/or convert them into the text to execute the command. Speech recognition is even used in apps such as Google Maps, Shazam, and other hands-free systems.

- **E-mail marketing:** Artificial intelligence is making email marketing even better, both for the marketer and their customer. Artificial intelligence can use data to create personalized emails to every one of the company subscribers, based on their previous interactions with the brand. It can customize based on what content they've consumed, what's on their wish list, what pages they have spent the most time on, and more. The automation will save time scheduling and sending emails to customers. After segmenting the audience and their emails, AI helps personalizing newsletter's content sent to each of business audiences.

- **Image recognition:** From a marketing perspective, image recognition can better synchronize the online content and store visits. It helps marketers to find visuals on social media, even if they are not accompanied by the relevant caption. Many stores trace customers' in-store visits through facial recognition software and link to their profile to serve them with a better online shopping experience. Some others combine this technology with AI-managed push notifications to send real-time offers, discounts, and personalized messages to customers individually. This increases the interactions between stores and customers as well as keeps their excitement longer when staying in the store.

- **Augmented Reality:** One another aspect of the Artificial intelligence which has the potential to provide better customer satisfaction is Augmented Reality (AR). AR can provide the customer with the option of seeing and feeling the production before the online purchase. Incorporation of such technology can

definitely stimulate better and faster response from the customer which ultimately will reflect in the revenues.

- **Ensure data quality and privacy:** Once fully and correctly implemented, AI can improve the data quality and privacy of an organization. Usually, marketers will need a vast amount of data at their disposal. Therefore, to leverage Artificial Intelligence solutions, it's crucial to have quality data in a place that is suitable for AI to perform its job. Using a modern data warehouse and deploying all-in-one data management software to avoid data quality issues caused by complicated data management. AI provides better data acquisition and prevents this rich source of information from being harmed by cyber attacks.

2.5. 07 Impressive examples of AI in Marketing

AI in marketing may feel more science fiction than fact to many, but it's not a far-off concept; it's here right now. According to Salesforce, just 29% of marketing leaders used AI in 2018, but that number surged to 84% by 2020 (Norris, 2021). Some examples are given bellow:

2.5.1 Nike: Personalized online experiences

Nike creates personalized experiences for customers by using artificial intelligence. The technology enables Nike's website to recommend products that uniquely suit customers. It also enables customers to search for products using conversational language, images without interacting with a person. Nike uses AI thoroughly to personalize the customer journey, which is a huge value-add to their business.

2.5.2 Amazon: Personalized shopping recommendations

Amazon has set the standard for product recommendations and continues to be the leader in the e-commerce marketplace today. Amazon's product recommendation feature provides customers with more personalized and enjoyable shopping experience. Research shows that 53% of shoppers say they always do research before buying a product to make sure that they are making the best possible purchase (Jade, 2022). That's why product recommendations will be a great help for customers to find what they are looking for.

Whether the recommendations are based on customers' historical purchases or just similar products at different pricing points, it's effective to educate customers and empower them to make the purchase decision much easier. Besides, Amazon also designed a pricing strategy to excel in the modern and ever-changing market. Amazon's dynamic pricing is a great success. Instead of overwhelming customers with the rapid changes in prices, the company leverages this strategy to adjust its prices at the same rapid pace of the market demand. This helps Amazon stay ahead of the competition and grab the first-mover advantage to offer customers compelling products' prices before their rivals take any action.

2.5.3 Alibaba: FashionAI store

Alibaba brings AI to fashion to improve the fashion retail experience by opening a physical Fashion AI store in Hong Kong. This use of Artificial Intelligence effectively simplifies the apparel shopping experience and gains more customers' interest.

Alibaba's Fashion AI store uses 3 key features to streamline the fashion retail experience for customers:

- ✓ **Smart lock to capture customers' preference:** Products in this store have special tracking tags containing radio-frequency identification, low-energy Bluetooth chips. Each garment will carry specialized information about the item it's attached to.

- ✓ **Smart mirrors:** The store's mirrors are located on the sales floor and in changing rooms with intelligent touch screens. It displays the information about the items customers are interacting with thanks to the intelligent locks equipped with each product. Smart mirrors can also recommend other apparel to complement the items customers are currently browsing.

- ✓ **New fitting experience:** This concept enables customers to quickly get the best look at what they wear by adding suggested garments and accessories brought to them by the store's staff after they try out an item. Fashion AI store also has plans to integrate the brick-and-mortar store with a virtual wardrobe app Taobao app that will allow customers to see the outfits they tried on in-store. Fashion AI also carries increased omnichannel capability with a "Virtual Wardrobe" on its mobile Taobao app. Alibaba's use of technology is a response to the consumers' shifting expectations.

2.5.4 BMW: Intelligent Personal Assistant

Besides the technology to learn about the driver and adjust the system and cabin experience to best fit each individual, BMW's AI-enhanced sports cars are also equipped with an intelligent personal assistant. This personal assistant enables various vehicle functions such as Climate control, Lights, Media, and settings like Caring car, Experience Modes, etc.

This amazing assistant allows drivers to communicate with their cars like they do with smartphones. It is a voiced-activated manual that can anticipate travel routes to simplify the destination input, alert the drivers, and integrate with other apps.

2.5.5 Starbucks: Reward Program/Mobile App

Starbucks captures its prospects' data through the use of AI in Rewards Program and Mobile App. In fact, Starbucks has successfully built its relationships with customers through this Rewards Program. For example, the company gives its customers free coffee on their birthdays. Via its mobile app, customers can talk with the barista via voice assistance to order their coffee.

Through this AI-powered tool, Starbucks acquires its customers buying history and gives them tastes they know them will enjoy after considering the date of purchase, the

time of order, and the location.

2.4.6. Sephora: Chatbots

Beauty brand Sephora was an early adopter of AI. They began using a chatbot to dispense beauty advice on Kik in 2017.

Sephora's chatbot helped consumers narrow down choices, beginning with a quiz about their product preferences. Product preferences are especially helpful in the cosmetics industry, where the options can be overwhelming and difficult to purchase without testing in person. Sephora gained valuable insights from their chatbot and saw enough engagement from that experiment that it's since launched more chatbots on Messenger.

2.5.7. eBay: Uses Brand Language Optimization to Drive Email Marketing Success

Global e-commerce marketplace eBay is always striving to find new ways to engage customers. That means it's got plenty of AI marketing examples to show us.

Since 2016, the company has been working with artificial intelligence-powered customer experience platform Phrasee to enhance its marketing copy, focusing on email.

Wanting to shift the creative burden away from its internal team, eBay turned to Phrasee, which uses a combination of natural language generation and deep learning to create copy at scale while dynamically optimizing performance.

Phrasee's computational linguistics team built language models for eBay, allowing the e-commerce giant to generate custom copy tied to its brand tone, customer needs, and specific promotions at the click of a button.

In the years since it first teamed up with Phrasee, eBay has enjoyed substantial improvements in its key email marketing metrics, including (Zhang, 2021):

- 700,000+ incremental opens per campaign

- 56,000+ incremental clicks per campaign

- 31% average click uplift

4. <u>Conclusion:</u>

AI is gaining traction in the digital marketing industry, and it is for the right reasons. The technology is such a broad term that encompasses several other technologies. Putting things in perspective, AI technology speaks about any technology that simulates human intelligence. It is not uncommon to see marketers speak so highly of the latest technologies and their application.

The application of AI in digital marketing strategy can bring immense benefit to marketers. AI is now moving to a new phase where it will enable improved productivity, organizational efficiency, and higher profitability for organizations. It will help organizations gain, grow, and maintain customer loyalty by having a better understanding

of customer needs and behavior. AI technologies will be the most valuable tool for digital marketers, as technology is now getting more and more affordable and accessible. Such techniques will be a strong influencing factor for customers in choosing the right brands and products for their requirements. Hence, markets need to adopt such technology for growth and meeting customer's expectations.

Overall, this paper provides a framework with a theoretical contribution that explores the relationship between AI and digital marketing. Artificial Intelligence is a rapidly growing technology and its use in digital marketing will only continue to increase in the years to come. From the above discussed case studies, we can see that it is already being implemented by several brands and companies. Plenty of business entities are looking to equip themselves with artificial intelligence to meet the demands of their online market. With the rise of the digital era, AI technology applications are going to disrupt the digital marketing environment in the coming decade.

Although artificial intelligence can benefit business digital marketing strategy, AI isn't here to replace entirely the jobs of marketers or advertisers. Unquestionably, AI helps marketers fulfill their dream to do marketing in a personalized meaningful way and up their creative potential .For this advertisers and marketers must adapt to the current AI trend because it will be the future.

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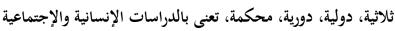
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