Can companies in digital marketing benefit from artificial intelligence in content creation?

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CHRONICLE	ABSTRACT
	AI is tanking different functions of businesses, and marketing is no exception. Digital marketing is gaining pace with the advancement in technology and the internet. The research aims to find the answer to the research question that marketers can benefit from AI in content creation for the digital market. The study also finds the relevance and use of AI in content creation and develops an AI infrastructure adoption model for content creators in digital marketing. The findings of this study were compiled using a systematic literature review that adhered to the Preferred Reporting Items for Systematic Reviews (PRISMA) statement and the criteria established by Meta-Analyses. The findings revealed that using AI in content creation provides personalized data, which helps the creators make relevant, targeted, and specific content. The research also finds that AI alone is not mature enough to carry out the whole content creation procedure as there is some limitation attached, especially regarding ethical implications. That's why human surveillance of AI systems involved in content creation for the digital market is needed.

1. Introduction

Since the first computers debuted in the 1950s (Boukhari, 2021), artificial intelligence (AI) has undergone a second renaissance. It is all down to the explosion of available data and computing power, and it has enabled the creation of computational (algorithmic) models that can detect trends and adjust on the fly by computer scientists. Artificial intelligence applications are employed more often in fields and contexts besides computing. Smartphones, recommendation engines, and support desks all fall under this heading (Choudrie et al., 2023) (Adwan et al., 2022). Journalists, artists, musicians, and marketers, all fields formerly assumed to require human intelligence, now see AI assuming increasingly sophisticated roles (Alaql et al., 2023). Marketing is not an exception and has been influenced using AI (van Esch et al., 2019)

Digital marketing aims to forewarn businesses of potential threats and help them capitalize on emerging opportunities by improving the quality of their strategic decision-making. Cognitive technology and open sources of big data may impact digital marketing in the era of digitalization. Today's society relies heavily on digital and cellular technologies. Artificial intelligence (AI) simulates human abilities using speech recognition, visual perception, and decision-making systems (Zhang & Tao, 2021). According to a recent survey of business executives, 24% of American companies now use artificial intelligence (AI), and 60% expect to do so shortly (Vlačić et al., 2021). Industries are in flux due to technological advancements in recent years. The marketing industry has reached a tipping point when adhering to digital developments is crucial (Dumitriu & Popescu, 2020). With today's technology, businesses may interact with their clients on a more personal level. This article outlines the growth of the marketing and AI research sectors and a practical model for content generation utilizing AI for digital marketing in response to the increasing interest in AI among marketing researchers and practitioners. As such, this literature evaluation aims to address the following research question.

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This research performs a comprehensive literature evaluation of relevant studies and analyses to achieve this goal. This research uses a screening process to identify the most pertinent English-language, peer-reviewed journal articles for a full-scale literature evaluation. With the help of AI for digital marketing, examining data from reliable sources to develop the content production model. According to the Preferred Reporting Items for Systematic Reviews (PRISMA) and Meta-Analyses statement, the findings of this research were presented in a manner that is consistent with its reporting. The significance of this study using artificial intelligence (AI) has become an increasingly important tool in digital marketing, and one area where it has shown significant potential is content creation. Using AI-powered tools for content creation can help companies improve the efficiency and effectiveness of their digital marketing efforts. One key benefit of using AI in content creation is that it can automate many of the time-consuming and repetitive tasks involved in the process. AI can help analyze vast amounts of data, generate insights, and develop content tailored to specific audiences, saving companies significant time and resources (Haleem et al., 2022). This can also improve the quality and consistency of the content.

Another benefit of using AI in content creation is that it can help companies create more personalized and targeted content that resonates with specific audience segments. By analyzing customer data, AI-powered tools can identify patterns and preferences in customer behavior and use that information to generate content that is more likely to engage and convert those customers. This can increase customer engagement, loyalty, and conversions (Campbell et al., 2020). However, it is important to note that AI is not a silver bullet, and companies need to ensure that the content generated by AI is of high quality and aligns with their brand and messaging. Companies should also work to balance AI with human creativity and input to ensure their content stands out and engages their audience (Haleem et al., 2022).

In conclusion, AI can bring significant benefits to content creation for digital marketing, including increased efficiency, personalization, and effectiveness. As technology continues to evolve, it will likely become an increasingly important tool for companies in digital marketing.

2. Literature review

2.1 Help from AI during the content creation

Internet of Things (IoT) devices make customers' lives easier and more convenient since they can check in on, manage, and adjust everything hooked up to their network from afar with just a few clicks (Kumar et al., 2020; Adwan & Aladwan, 2022). Intelligent assistants like Siri, Alexa from Amazon, and Google's Assistant are examples of robots (Chintalapati & Pandey, 2021). They automatically check the price (de Barcelos Silva et al., 2020), compare them, and provide individualized suggestions based on a few simple requests. They make it feasible for businesses to provide clients with a more individualized and relevant experience to meet their needs better (Mikalef & Krogstie, 2020). Long-term customer loyalty is increased through personalized messages and product offerings (Qin, 2020). Those actions range from buying the company's wares to sharing their pleasant experiences with them on social media and promoting them to their friends and family (Park et al., 2021).

In digital marketing, AI can help businesses with content development. Many professionals in the field of digital marketing need more knowledge and skills to fully realize the potential of AI applications in their designs and methodologies. Artificial intelligence causes widespread upheaval in the digital and social media advertising industries (Nair & Gupta, 2021). AI can boost content marketing (Haleem et al., 2022). AI has allowed marketers to segment their audiences and connect with potential clients on their terms. As a result of AI, specific messages can be sent to various subsets of the intended audience. Researchers demonstrated that AI could be helpful in digital marketing for comprehending customer data, optimizing content, and targeting specific demographics (Haleem et al., 2022). China's digital publishing sector uses AI (Xiao et al., 2019). This is not about content marketing, but it does point to the potential use of AI: the employment of such technology in digital publication. According to the research papers, AI can help digital marketing businesses develop content. The research also indicates that there may be various advantages to adopting AI in content generation for digital marketing. AI could be used to mine social media for insights into customer habits (Chintalapati & Pandey, 2021). In digital marketing, AI can be utilized to provide more engaging content and consumers' actions and feelings can be analyzed, allowing for more informed decision-making, and developing more effective marketing campaigns (Huang & Rust, 2020). AI could enhance digital marketing tactics (Haleem et al., 2022) as it will alter future marketing approaches and consumer habits (Davenport et al., 2019). The studies have highlighted that businesses would benefit from utilizing AI in content production for digital marketing because it would allow them to understand their target audience better, produce more engaging content, and refine their overall approach to reaching customers. Recent interest from academics and industry professionals may be traced back to the proliferation of big data, the lowering of barriers to entry for processing power, and the development of artificial intelligence (AI) strategies and technology enablers (Vlačić et al., 2021).

2.2 The Various Forms of AI Implemented in the Production Process

As a result of the data they collect, AI aids marketers in creating and targeting particular, tailored pages and content (Haleem et al., 2022). The landing page elements collaborate to answer the visitor's questions as they scroll down the page. They are

more likely to respond to a CTA and help you reach your conversion target (Tsagkias et al., 2020). With the help of AI, businesses can give greater attention to their customers and meet their immediate demands. Algorithms' ability to collect and generate data simplifies the process by which marketers determine which channels and pieces of content to use to reach customers. AI-enabled customizations put customers at ease, increasing the likelihood that they will buy advertised products (Tong et al., 2019). Artificial intelligence supports marketers in making sense of the ever-changing world of content marketing by analyzing user data and deciphering user intent (Chan-Olmsted, 2019). This is accomplished through the use of machine learning.

The ability of artificial intelligence to construct simulation models and personalize purchasing processes through recommendations and forecasts provided by machine learning technology is one of the primary reasons many companies have started employing AI in their efforts to interact with the consumers who make up their target market. The data-driven field of Artificial Intelligence (AI) has produced a brand-new intelligent computer that can mimic human cognition, social behavior, and task execution. Automation, audio and image recognition, language processing, problem-solving, and many other highly technical and specialized tasks are all within the capabilities of artificial intelligence (Jarrahi, 2019). These studies prove that artificial intelligence (AI) can produce content on par with humans. Based on how they employ AI technology, Anantrasirichai and Bull (2021) classify creative applications into five buckets, namely content creation, data management, content advancement, post-production frameworks, information retrieval and optimization, and data compression. Researchers here check out the pros and downsides of this rapidly evolving technology. It draws more distinctions between AI's potential as a creator and its utility as a creative tool. It forecasts that soon, ML-based AI will be widely employed as a conceptualizer or a partner in creative endeavors.

In contrast, ML has shown limited success in areas with fewer restrictions, and AI plays the role of "maker." With the current tools, it will be difficult for artificial intelligence (or its creators) to compete with human ingenuity in original work. In the context of creative industries, human-centric applications of AI are the most fruitful, meaning they are intended to complement human creativity rather than replace it.

2.3 Ways content creators benefit from AI-based personalization

The research does not fully address the question, "How can AI personalization aid content creators?" While much research has focused on digital marketing's potential as a medium for communication and sales, this trend has necessitated the deployment of CRM systems to ensure accurate record-keeping within businesses (Saura et al., 2021). According to Hermann, there is vast potential for personalization and targeting in mass personalizing communication content backed by AI (Hermann, 2021). This indicates that content makers can gain from AI personalization of content by increasing chances for customization and targeting. Hermann observed that while these possibilities are exciting, they also present tricky ethical questions. Research on how AI personalization affects content providers' reach has yielded conflicting results. Risi and Togelius and Haleem's articles argue that personalized artificial intelligence could expand publishers' audiences. Media creation can benefit from AI because it allows for the stronger hybridization of humans and machines, which in turn allows for the automation of specific activities (Risi & Togelius, 2020; Haleem et al., 2022).

Furthermore, using a steady stream of consumer data to fuel the production process has altered the process, transforming it from linear to cyclical. Research delves into the correlation between AI personalization and content marketing (Kumar et al., 2020). He discovered that individualized products and services could be designed, communicated, and distributed using AI. According to a summary provided by Chan Olmsted, artificial intelligence has utilized in the media in the following eight distinct ways: information breakthrough and suggestion, audience interaction, enlarged audience experience, text enhancement, data management, content generation, data on public and operational robotization (Chan-Olmsted, 2019). There is a web of connections between the outcomes of evaluating all eight dimensions. Creating a checklist for gauging transparency in personalization systems can be ineffective due to the lack of the resources to examine and execute openness in algorithmic systems. More outstanding direction is needed to help system designers evaluate and apply the transparency crucial to customized systems' success (Sokol & Flach, 2020). With proper disclosure, AI-powered personalization may help content producers reach more people.

2.4 Advantages of Using AI for Content Production

In addition, the findings demonstrate that AI has the potential to profoundly impact the content creation sector while simultaneously producing high-quality, satisfying content. To maximize productivity and customer satisfaction, marketers and e-commerce platforms are adopting AI technology into their promotional strategies (Haleem et al., 2022). The expanding e-commerce sector necessitates the employment of tried-and-true methods of advertising management; they have taken the necessary steps to ensure that these needs are addressed. The findings suggest that large amounts of publicly available data considerably impact digital marketing, but AI's analytic prowess is needed to exploit this potential fully. AI mitigates the influence, can sift through massive data, and extract valuable and relevant insights. It has been shown that (Qin & Jiang, 2019) The four phases of the advertising process bolstered by AI technology are identifying consumer insights, developing ads, acquiring media, and measuring their effectiveness. Tools-based, synchronized, and very efficient, the new advertising process is supported by a data-based platform at the heart of which lies algorithms. Artificial intelligence (AI) has streamlined and

modernized the advertising process, making it more effective. AI also has the potential to revolutionize the advertising industry by automating the media procurement process and stimulating new forms of creative thinking. Marketers are scrambling to find the most effective artificial intelligence tools to carry out their duties (Verma et al., 2021). It is expected that virtual assistants and programmatic advertising, both examples of AI applications, will soon play a central role in digital marketing (De Bruyn et al., 2020). However, the creative advertising process still requires substantial human work. These studies do not answer the question "What are the benefits of utilizing AI in content creation?" head-on, but they imply that AI can be helpful in this setting. The potential advantages of using AI in content creation must be explored further.

2.5 AI vs. Humans

Human versus AI in content creation has recently received much attention. Artificial intelligence can be utilized to make excellent art. The usage of AI in content marketing was proven to be effective. Research also discovered that the quality, satisfaction, and readability of material are affected by the content source (human vs. AI) and the medium of information transmission (text vs. audio vs. video) (Correia et al., 2020). Although AI can be used to produce content, Anantrasirichai and Bull (2021) discovered that the results are superior to those produced by humans. Thus, the merits of AI in the content creation process vary with the kind and context of the content being created. This content can be of less outstanding quality for AI to make it. Aizenberg and van den Hoven concluded in the year 2020 that although AI systems can assist with the generation of substantial proof and decisions that are efficient, they can also provide individuals with illogical and prejudiced decisions that are mistakenly thought to be reliable because of their intuitive and quantitative nature (Aizenberg & van den Hoven, 2020). Human rights will be compromised because of these technological advancements. Despite increasing recognition of the importance of these problems, technical solutions to complex socio-ethical problems are often shaped by personal judgments which are far from the experimental study of sociological phenomena and the crucial participation of community leaders whose lives will be modified by the advanced technologies in question (Mariani et al., 2021).

In contrast, while there have been calls for AI to be more ethical and socially conscious, advocates have generally offered few concrete solutions beyond reiterating the need for openness, explain ability, and fairness. To promote sophisticated, situationally appropriate design assessments that will serve moral and social ideals, it is essential to bridge the socio-technical gaps and the vast chasm between the conceptual meaning, vocabulary, and design needs. This begs the question, how does AI stack up against humans regarding imagination and moral weight? The importance of content control is referred to the study by Gillespie (Gillespie, 2020). Ragot discovered that people preferred artworks they were informed were made by humans rather than artificial intelligence (Ragot et al., 2020). This would indicate that people view AI-generated artwork as inferior to that produced by humans. The publications cited above indicate that artificial intelligence must still be considered creatively superior to humans. However, if AI development progresses, this may eventually alter. Human resources are few; those available must be allocated to activities requiring high human involvement and cannot be reliably mechanized (Cetinic & She, 2022). A recent study indicated that well-known persons who employ AI to aid the market in the digital age will get a bigger audience than they do now. This is due to the speed with which AI can respond to information rather than people and the ease with which it can screen and classify customers. The conclusion to be drawn from this is that artificial intelligence still needs to be capable of completely replacing humans in the workforce (Vrontis et al., 2021).

3. AI adoption model

The literature review and analysis led the researcher to develop a model for adopting AI infrastructure in the business (Fig.1).
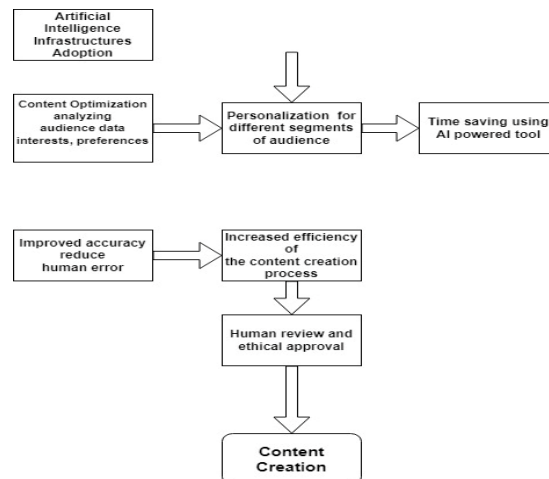

Fig. 1. AI infrastructure adoption model

As the literature review suggests, AI in marketing leads to data and content optimization. Different audiences can be assessed through data optimization, and personalization becomes easy as AI quickly processes enormous amounts of data. Efficiency increases, and the content creation becomes more relevant, precise, and personalized. AI systems must still be mature enough to operate independently, especially in ethical jurisdictions. Human intervention and surveillance must lead to innovative and relevant content creation.

4. Methods

The methods section of this research follows the format recommended by PRISMA, an international standard for reporting systematic reviews and meta-analyses (Page et al., 2021). PRISMA is one of the academics' most famous systematic review guidelines (Rethlefsen et al., 2021). The PRISMA guidelines are practical recommendations to boost open, thorough research reporting based on systematized reviews. This research aims to conduct a systematic review comparing similar studies concerning study design, participants, interventions, comparators, and outcomes (PICO framework) (Amir-Behghadami & Janati, 2020). To qualify, the research design had to be a prospective field study reporting connections between businesses using AI for content creation in digital marketing. Adults from various backgrounds, industries, and employment situations (including those without jobs) participated in this study. Studies that looked at the advantages of using AI in content creation, the role of AI in digital marketing, the benefits of using AI in content creation, the advantages of AI personalization to the content creator, and the social and ethical implications of using AI in content creation were also considered. The control group included people researching the function of AI in digital marketing, the types of AI used in content creation for business interventions, or the advantages of using AI in content creation for various interventions. Thus, all relevant outcomes arising from the interaction with or implementation of AI and impacting the content creation in digital marketing of the study sample were considered. Further, only English-language, peer-reviewed journal articles were considered, while conference proceedings, dissertations, and similar manuscripts were not.

4.1 Collection of bibliographic sources

Electronic databases such as Web of Science, Google Scholar, and Scopus were systematically searched to find primary sources. A third party manually searched reference lists of cited studies and relevant reviews for relevancy and inclusion (Skopec et al., 2020). Scopus was the go-to for information gathering because of its broader scope. Scopus provides superior data administration by employing sophisticated search filters and data analysis grids. Searches were supplemented with Google Scholar results.

4.2 Search strategy

Expert professors and librarians were approached for their knowledge on the matter. AI, artificial Intelligence, marketing, digital marketing, ML, big data, data mining, and integration were among the top queries at the outset. Common themes categorized the significant findings.

4.3 Enhancing the preliminary findings (Inclusion and exclusion criteria)

Any study focusing on a subset of a population must define its inclusion and exclusion criteria. With this method, researchers more reliably, precisely, and objectively identify the people in their study population. Articles published in English peer-reviewed journals were considered for this study, but theses, dissertations, and conference proceedings were not.

4.4 Procedures for Analyzing Data

The screening procedure began with the articles imported into Thomson Reuters' EndNote X8 program. Then, a web and mobile application were utilized to screen all created articles for relevance. A log was kept of the studies not included in the analysis. Before selecting studies, double-checked each step to identify any potential reviewer needing clarification over the qualifying criteria or the software's user interface. The procedure for selecting studies is depicted in Figure 1. The study's data was entered into an Excel sheet after being culled by the researcher. Five articles were used as a pilot to test this phase and ensure it would be manageable and thorough. Large amounts of aggregated and specific information were gathered (Table 1). Subsequently, the investigator applied a criteria-based categorization to developing themes in artificial intelligence (AI), digital marketing (DM), and content production (CC). This study is premised on what was found in the research literature. Among the topics covered are the role of AI in digital marketing, the advantages of AI for content producers, the various types of AI used in content creation, the advantages of AI personalization in content creation, the debate between humans and computers in the content creation process, and the societal and economic consequences of this trend. The selected articles were sorted and categorized based on these themes.

4.4 Identifying areas for further research and providing possible avenues

Researcher decided to employ the GRADE to establish a uniform mechanism for evaluating the quality of recommendations (Brozek et al., 2021). All potential problems with the quality and consistency of the study procedures were evaluated using a standardized risk-of-bias instrument. The Cochrane risk-of-bias tool, version 2, was used to evaluate randomized controlled

trials (Higgins et al., 2019). The ROBINS-I instrument was utilized to analyze the potential for bias in studies that did not randomly select participants (Sterne et al., 2019). The quality of longitudinal investigations was considered when researcher developed a set of criteria for future observational studies.

5. Findings

5.1 Bibliographic description and analysis

After searching Web of Science, Google Scholar, and Scopus, the 427 relevant articles were located. The duplicate article search found 55 that might be safely deleted. The remaining 374 papers had their titles and abstracts assessed to see if they were relevant to the study. In total, 210 incisions were made. An additional 127 papers were discarded after a full-text examination determined they were irrelevant to the study. Only 37 items remained after removing the duplicates.

5.2 Scientific actors' efficacy

5.2.1 Best available literature

According to the total number of publications appearing in various journals, Table 2 lists the top three reliable references. Big Data & Society has published most research articles examining AI's role in developing digital marketing content. Big Data & Society has twice as many journal papers from the top two journals in their field, ArXiv Preprint and Developing Digital Marketing. In addition, the H-index and I10-index were used to compare the three most relevant sources to determine which one was the most important. The H-Index and I10-Index show that Big Data & Society is the most influential journal in its field. Big Data & Society is the best resource for this topic.

Table 1
Journal with most AI & DM articles

Source	Published paper	H-Index	I10-Index
Big Data & Society	64	36	60
ArXiv Preprint	37	21	44
Developing Digital Marketing	32	28	52

5.2.2 Pertinent writers

Table 2 lists the seven most influential authors (H-Index and I10-Index) based on maximum article counts and citation counts. Thomas Davenport's 359 I10-Index and 107 H-index put him ahead of all other researchers. Two researchers, Qin X and Giuseppe Amato, are enthusiastic about using AI in the advertising and creative industries. Meanwhile, Chan looked at how rapidly the media sector was adopting AI. There may be a disparity between the number of citations a piece of research receives and its impact on a particular field or industry.

Table 2
Pertinent authors in AI and DM

Author	H-Index	I10-Index
Thomas Davenport	107	359
Qin X	50	129
Giuseppe Amato	45	107
Chan-Olmsted	41	84
Aizenberg, E	40	81
Schelenz, L.	31	77
Utku Kose	27	64
Jose Ramon Saura	34	62
Eva Cetinic	25	51

5.3 Relationships between keywords and their occurrences in the same context

In prior bibliometric studies, keyword analyses were used to ascertain the nature of the articles and the most prominent topics (Huang et al., 2019). In this study, I conducted a co-occurrence analysis of terms to identify keyword co-occurrence networks (Rashedul et al., 2022). By analyzing the relationships between terms, create a visual representation of the knowledge structure of a scientific topic and get insight into it. Co-occurrence analysis delves into the connections researchers establish between concepts when choosing keywords for their papers (Goodell et al., 2021). Accordingly, researcher consider the proximity of one keyword co-occurrence network to another as an indication of the similarity between the two concepts and consider terms to be conceptually connected if they appear in the same keyword co-occurrence networks. Figure 2 displays the analysis of the frequency of occurrence of keywords. As shown in Figure 2, AI, big data, and machine learning are all inextricably linked and indispensable to one another.
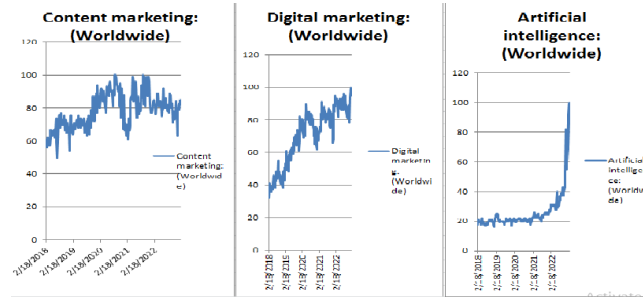
Fig. 2. Keyword co-occurrence

However, they are connected to other networks by keyword co-occurrence. Neural network properties, such as patterns of keyword co-occurrence, better anchor thought abilities like learning, memory, and inference. There are ties to marketing management activities such as target market analysis and maintaining client relationships. Using a co-occurrence analysis, determined which terms occurred most frequently. Graphic representation of the co-occurrence data reflects this with larger circles for more frequent occurrences. According to the findings, the most prevalent concepts shared by all co-occurrence networks were machine learning, AI, big data, data mining, and marketing. Next, the literature discusses each keyword co-occurrence network's relative frequency of occurrence.

5.4 A Look at trending topics

In Fig. 3, the researcher sees the study area's evolution over time, as depicted by trend analysis. The tendencies include the period of February 2018 - January 2023. The graph shows that interest in content marketing, AI, and the digital market has increased since its inception. Since 2021-22, there has been a dramatic increase in study topics. The exponential growth in interest in AI-related topics after February 2022 indicates a shifting trend. AI in marketing must consider the target audience's mental state (Mariani et al., 2021). That is why AI content must take social and ethical concerns into account. AI is helping marketers make sense of the vast amounts of user data and cryptic user intent to navigate the ever-changing landscape of content marketing. Short tales, such as stock market reports and sports scores, may soon be automatically generated by AI to save time for marketers. Since online communities will continue to grow, computational technologies that make sense of big data and deep learning divisive consumer sentiments are needed (Kumar et al., 2020; Mikalef & Krogstie, 2020). Insightful consumer data can be gleaned from user-generated material on social networking sites, allowing for more informed business decisions. An optimization framework for studying commercials on the object level was created by Zhang et al. (2020). Some of how artificial intelligence has applied to the media include consumer content suggestions, consumer connection, the enhanced mood of the audience, content optimization, content management, content production, consumer insights, and functional robotics (Chan-Olmsted, 2019). Marketers anticipate that AI-based apps, such as virtual assistants and programmatic advertising, will soon constitute the backbone of digital marketing (De Bruyn et al., 2020). Using AI to personalize content can help writers by opening up new avenues of audience engagement. Hermann 2021 discovered that along with these possibilities also came ethical challenges. The four pillars of an effective advertising campaign are finding consumer insights, creating ads, selecting media, and measuring their effectiveness (Qin & Jiang, 2019), which make up the advertising process driven by AI technologies.

Fig. 3. Research trend

6. Prospective research pathways

Systematic literature reviews help locate research gaps and draw attention to under-researched but important topics because they are thorough, methodical, and analytical. First, researcher present results that follow logically from the review of the relevant literature. Then, explore areas the author considers crucial but have to receive much attention in the existing literature.

6.1 Reorganizing bibliometric findings

This SLR categorized the study's central question into five categories: How might AI aid writers in the following ways? (1) The types of AI utilized in content creation for digital marketing; the advantages of AI customization in content marketing; the benefits of AI overall for digital marketing; and the ethical implications of using AI in content marketing. It would be possible to establish connections between these many headings. The necessity to consider the user's emotions and psychology is an example of the socio-ethical considerations inherent to AI in digital marketing content development. The first section features pieces emphasizing the significance of consumer analysis and marketing content creation using artificial intelligence. As cross-disciplinary studies using AI in content production for digital markets and customer behavior and analysis become more relevant in the future, they may present several research opportunities that could contribute to the growth of this section. Improvements in transparency and trust, regulation-based auditing of AI systems, and the flexibility to fine-tune AI systems when they display erratic behavior are just a few of the issues that study can shed light on and help solve psychological knowledge concerning AI and AI in marketing and consumer research. The second overarching theme is comprised mainly of pieces that deal with various forms of AI employed in digital media production. This field of study contributed to developing a good model for AI content generation. An increasing number of AI academics in psychology are teaming up with AI professionals to influence future AI development by learning more about the mental processes that underpin how people think about and interact with AI. The third broad category includes research into AI's capacity for individualization. When it comes to artificial intelligence and online advertising, this field is well established.

6.2 Mutual enrichment from related but distinct fields

The many parts can enrich one another. For instance, data-driven model research can benefit from adopting AI with a personalization function like that utilized in digital marketing. In the digital market, for instance, there is evidence that AI features can extract, evaluate, and compress data. Since AI personalization relies on several factors, these characteristics naturally connect to that process. One can also draw connections between the abovementioned factors and the advantages of employing AI in content development for digital marketing. This will benefit big data, social networking, and text mining.

6.3 Neglected areas of study

Surprisingly, several important issues received a different kind of scholarly attention than believed they deserved. The most pressing issues surrounding AI, including ethics, fairness, and privacy, have yet to receive the attention they deserve in their respective disciplines. The tremendous power of AI (Feijóo et al., 2020) raises significant ethical problems beyond those connected to privacy (Aizenberg & van den Hoven, 2020). Using client data in automated decision-making by AI systems is one example, with all the potential prejudice and unfairness it entails. Concerns about dehumanization, loss of autonomy and dignity, and social isolation have only scratched the surface of AI's effects (Aizenberg & van den Hoven, 2020). The knowledge gap, however, is still substantial. The concept of digital corporate responsibility can be developed further (CDR). The term "critical data responsibility" (CDR) refers to the moral obligations that businesses (particularly marketing departments) have while developing and deploying various sorts of AI and digital tech (Wirtz et al., 2021).

In summary, most AI literature has concentrated on increasing productivity and providing service benefits, such as improved convenience, availability, affordability, seamless customer journeys, and comprehensive customer service procedures. It would be interesting to investigate the applicability of marketing theories via the lens of AI because it would provide a different perspective.

7. Evidence restrictions

The study's predominant shortcoming is using secondary data from earlier research instead of conducting original research. Despite being a synthesis of previous research, the quality of the evidence would be the same if the study had been conducted on a larger scale, incorporating a variety of companies that have already deployed AI and considering the effect on individual and corporate innovation and creativity.

8. Study Implications

This study may interest companies and individuals involved in marketing responsible for advertising, events, promotions, discounts, public relations, and marketing services. Organizations can gain a competitive edge by using AI to glean insights from their vast stores of industry data (Mikalef & Gupta, 2021). Marketers might utilize data mining tools to find the best customers and examine their profiles to ensure the two parties are a good fit. In addition, marketers might employ algorithms to ascertain the optimal campaign approach that maximizes return and brings about more conversions. On the other hand, sales and marketing managers may employ ML and deep learning to develop targeted promotional strategies. Organizational considerations, such as management's familiarity with AI in digital marketing, affect how quickly businesses can adopt AI technology (Nair & Gupta, 2021).

9. Conclusion

Most research articles agreed that AI might significantly impact content development for online advertising. Its impact can be felt throughout a wide range of industries now. In addition, several experts have pointed to the opportunities big data and AI present for learning more about consumers' decision-making processes. One particularly intriguing discovery involved the possibility that a need for more openness in the personalization mechanism would hinder content makers' access to the ideal consumers. Additionally, the meta-analysis consistently showed that AI-enabled content creation for digital marketing would play a role in the future, perhaps even more so than it already does, especially when considering ethical and societal ramifications because it will play a role in areas that technological limitations have previously constrained.

Additionally, there is a need for thought and study into AI's creative potential and its ability to form relationships with humans. At present, success is measured by how human-centered it is. Previous research is reviewed to support the paradigm shown in Fig. AI greatly aids the Optimization of data. It can examine client data in order to tailor content to boost conversions. In digital marketing, AI is beneficial because of the large volumes of data it can handle quickly, boosting efficiency and allowing for more nuanced approaches to serving diverse segments of customers.

Meanwhile, artificial intelligence (AI) systems continue to develop and advance. Human monitoring, review, and approval are essential for creating on-target and morally beneficial content. In conclusion, AI holds a lot of promise and potential in content production for digital marketing.

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