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The Implications of Artificial Intelligence (AI) on the Quality of Media Content

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Abstract

The article aimed to identify the repercussions of artificial intelligence (AI) on the quality of creating media content. The research employed the qualitative analytical method, conducting semi-structured interviews with seven Jordanian journalists who work in various media institutions in Jordan. The results revealed that the fields in which AI is employed are design and graphics, dealing with big data, and reformulating content and written texts and that the media content topics in which AI is employed are "technological," "educational," and "economic." The most used AI applications and websites in journalism and media production were ChatGTP, Google Assistant, Designs.ai, Art Flow, QuillBot, Grammarly, Deepfake, Word.ai, Chatbots, AI-Writer, Siri, Blockchain, Otter.ai, and others. The results also revealed that AI has had crucial impacts on the quality of media content through the accuracy of data analysis, the acceleration of the editing process, and the enhancement of the (human) journalist's skill in editing and drafting. The authors recommended conducting more studies on AI in preparing fake news stories on social media platforms.

Keywords: artificial intelligence AI, journalism, media content

1. Introduction

1.1 Introduce the Problem

The media is the most extensive environment for providing information to the public, as well as the most active and effective field for responding to technological changes. Journalism and the media have a history of using technology to produce news and journalistic stories. The relationship between AI and journalism dates back to the early 2010s, when automated journalism platforms such as Narrative Science and Automated Insights emerged. These platforms represented the first wave of artificial intelligence journalism, employing algorithms to produce articles in information fields such as sports, economics, and meteorological journalism. The Associated Press was an early adopter of informational journalism when the agency began using Wordsmith, developed by Automated Insights, to create stock and financial market reports.

The increasing digitization of our societies, primarily caused by the arrival of smartphone devices and social media platforms, represented a defining moment that opened the doors to profoundly reshaping our environment. This matter persists with the continuous development of new digital technologies fueled by the race toward innovation. Among others, AI is one such technology that has the potential to bring about historic change. AI is a broad concept that includes a variety of technologies and methodologies, each with unique capabilities and limitations. In the 1950s, people first framed this idea as a reference to the "human intelligence" that machines displayed(Hansen et al., 2017; Helm et al., 2020).

Digitization processes have already affected so-called "traditional journalism," reshaping stakeholder interactions and the asymmetric relationship between journalists and audiences with new information production and consumption forms. This has led to the hybridity of journalism, which expresses a mixture of "old" and "new" journalistic standards and practices within an increasingly digital paradigm. AI ethics, a field related to ethical issues in artificial intelligence, has become an important research topic in academia and of common interest to individuals, organizations, countries, and society(Huang et al., 2023). In this sense, the emergence of open AI-based ChatGPT in November 2022 represents a

watershed moment because it represents a turning point in global access to technology that has made some professional competencies, such as images, voice, or generative text, obsolete. The Western news media industry has already taken advantage of this progress by introducing it into various stages of news production. Nowadays, within newsrooms, AI represents a valuable tool for "tracking massive data sets, generating leads, exploring media insights, and fact-checking news for research." about fake news, and simplifying the workflow of journalists in general." However, in social media, where information flows are edited and not subject to journalistic filters, AI creates images and videos that no longer require specialized skills and equipment(Bentivegna & Marchetti, 2018; Jamil, 2020).

The forms of information vary between text, images, audio, and video. AI applications have made the media environment more cautious, providing high-text formulation and image design capabilities. Thus, false content that contradicts or distorts reality can be produced. In March 2023, technology makers and AI specialists signed a petition demanding "a halt to AI development research for six months to allow for greater governance of this activity, to ensure that humans are not harmed by it." Hence, the concerns for the journalism sector regarding AI are in the areas of credibility, reliability, transparency, and privacy, given the great potential that generative AI can provide for campaigns of disinformation, falsification, and the spread of false news.

With the development of algorithms, journalists are turning to AI to deal with big data in extraction, tracking, analysis, and even identifying patterns and news templates. As a result, it is critical to consider AI's capabilities as a complementary tool that assists journalists in their work while adhering to established journalistic professional principles. Human supervision plays a crucial role in considering professional and ethical considerations when preparing media material, and it also enhances the efficiency of news collection and production processes.

1.2 The Importance of the Problem

Artificial intelligence technologies have recently developed significantly and have been integrated into journalistic uses. Its increasing accessibility through the emergence of platforms such as Chat GPT and Midjourney has revived discussions about this technology and its practices. Consequently, the relationship between AI and journalism has become a topic of increasing interest for researchers and specialists. AI technologies (such as machine learning, automated content creation and moderation, and speech-to-text software) have also gradually entered newsrooms and influenced journalistic practices, especially "the process of news gathering, production, and distribution." There has been interest in new concepts such as computational journalism, algorithmic journalism, or automated journalism(Kothari & Cruikshank, 2022).

In this regard, since 2006, many studies and literature have investigated the relationship between AI, building media material, quality of wording, detecting manipulation, and knowing sources. Since then, a wide range of research has been produced on this phenomenon to investigate this shift toward automating newsrooms(Calvo-Rubio & Ufarte-Ruiz, 2021). In 2017, the Tow Center for Digital Journalism issued a report that addressed the main topics related to AI and journalism: AI in the newsroom (training and development, practical applications, and challenges facing traditional newsrooms), techniques, and ethics (algorithmic bias, ethics of errors, trust, and advertising)(Hansen et al., 2017).

AI and the future of journalism go hand in hand," as AI is already transforming the journalistic field through automation, creating content, providing personalized content, checking and verifying facts, and engaging the audience(Dhiman, 2023). With all this, AI brings new legal and ethical challenges related to how media organizations use it in production, publishing, and building content. At the same time, there is a risk to accuracy, ethical issues, and public trust. Based on the above, the research problem arises in the fact that AI has become a reality accompanying the media environment and content creation, and thus, the necessity of revealing the extent of the impact of its use and employment on the quality and ethics of media content creation.

Accordingly, the main research question is: What are the implications of employing AI for the quality of media content creation? The following sub-questions branch out from this question: What are the fields of AI in creating media content? What are the media content topics addressed by AI? Which media employs AI? What are AI applications and websites for creating media content? What are the implications of employing AI on the quality of media content?

1.3 Relevant Scholarship

1.3.1 AI Concept and Purpose

Artificial intelligence (AI) uses computer systems to perform tasks that typically require human intelligence. In content production, AI automates different stages of the process, from concept generation to the last result. (AIContentfy, 2023a). AI is the simulation of human cognitive abilities by computer systems and machines, enabling them to perform tasks that usually require human intelligence (PECB, 2023).

AI is a growing trend in content creation with increased efficiency and productivity across various industries, including marketing and advertising, image and video recognition, audio transcription, analyzing large amounts of data, creating

summaries, articles, or reports that mimic human language, and categorizing and tagging visual content. AI helps select appropriate graphics or images for marketing materials and speech-to-text conversion to convert audio content into written form, which can help create texts, captions, or subtitles and improve content by analyzing user engagement and rating data(AIContentfy, 2023b).

AI-generated content results from algorithms that use natural language processing (NLP) to analyze and create text. It saves time, allowing content creators to focus on other tasks. It can also help create content in large quantities without compromising quality and can be used to create personalized content for different audiences(S. Kumar, 2021). Content created by artificial intelligence appeals because it can guarantee consistency, lower expenses, and boost efficiency. It is beautiful in industries with high content production requirements and tight deadlines. However, as AI becomes increasingly involved in content creation, concerns about quality and authenticity emerge(Ferreira, 2023).

Artificial intelligence-powered programs may examine user behavior and data to suggest content, generate headlines or social media postings, or even draft whole pieces or scripts. material curation and distribution also benefit from artificial intelligence (AI), which helps companies adapt the material for their audience, boost interaction, and change their marketing plans. Content production becomes faster, more cost-effective, and more efficient with artificial intelligence, freeing producers to concentrate on more difficult projects needing human involvement and creativity(AIContentfy, 2023a).

1.3.2 AI Fields and Impacts

Artificial Intelligence is widely used in the industry, content creation and management in various fields: banking and financial services, health services through risk assessment and treatment results, managing epidemics and reducing their consequences, health insurance, e-commerce services with a focus on greatly enhancing customer service, agricultural services and the use of computer vision technology to monitor soil and crops and produce healthy crops, and in the industrial sector(Ginimachine, 2022). It is also used in travel, hospitality, journalism, military, and diplomacy.

Apart from the advantages of artificial intelligence, its application in content production begs questions regarding the possible loss of human employment and the quality of the created materials. As artificial intelligence develops, it is imperative to carefully evaluate how it affects content production and guarantee ethical and efficient application of it. Using artificial intelligence in content production does have certain negative consequences, though. The fact that AI-generated content can require more human touch and creativity to make it distinctive and interesting raises one of the main issues.

Moreover, AI-generated material runs the danger of being seen as robotic or low-quality, therefore tarnishing the brand. Another disadvantage is the possibility of data used to train artificial intelligence systems being biased, which might have unanticipated effects or ethical questions. Ultimately, the utilization of AI in content production may result in job displacement and undermine the significance of human ingenuity in the content development procedure(AIContentfy, 2023a).

Accordingly, the performance of AI algorithms is directly dependent on the quality and comprehensiveness of the datasets used for their training. If the datasets contain prejudiced or erroneous information, the output created by the AI may also be prejudiced or erroneous. Another issue to consider is the possibility of AI-generated content violating intellectual property rights. If the AI system generates content that closely resembles existing content, it might be deemed as plagiarism or copyright violation. Additionally, the matter of transparency and disclosure is also of concern. Consumers should be aware that they are engaging with information created by artificial intelligence.

If the content is intended to manipulate or deceive them, it might be deemed immoral. There is apprehension over the potential of AI-generated content to substitute human labor, resulting in job displacement and other economic ramifications. Although AI-driven technologies for generating content might enhance efficiency and production, it is crucial to contemplate the potential repercussions on workers and society(AIContentfy, 2023a).

On the other hand, AI-generated content may lack human touch, making it difficult to distinguish between real and fake content. This can be particularly problematic in fields where credibility is paramount, such as news articles or scientific research(P. Kumar, 2023).

While AI can help create content, human oversight is necessary to preserve and value human creativity and expertise, maintain ethical standards, adapt to societal values, and thus improve AI models to maintain quality content(J. Sawalha, 2023). Additionally, the great benefits of AI should be noticed, and the presence of organizational culture and awareness of ethical considerations contribute to preventing its exploitation against ethical standards(FPT, 2022).

1.3.3 AI in Journalism

Artificial intelligence is an ideal tool to improve the speed of information collection, analysis, and generation speed. Over the past several years, artificial intelligence algorithms have improved their capacity to gather and interpret massive volumes of data. Utilizing user data, artificial intelligence technology can generate content on its own and tailor it. It is already common practice for some of the most prominent media sources to include AI in their workflow(Aissani

et al., 2023). Artificial intelligence (AI) technologies are already being used by news organizations in today's world to collect and analyze data from a variety of sources, and then merge this data into stories.

As an illustration, Forbes has developed a content management system that is based on artificial intelligence and is named Bertie. Bertie is an AI that recognizes information that is noteworthy and recommends headlines on its own. The Washington Post is responsible for the invention of Heliograf, which can write complete stories based on quantitative data(Babiak, 2023).

ICT (Information and communications technology) rapidly reshapes media and journalism in the modern digital age. Hence, the term aerial journalism emerged, which refers to the ability to create and transmit media content in a timely and effective manner by integrating a drone with AI to enable aerial journalism to accomplish media tasks accurately and quickly, including investigative reporting (such as humanitarian crises), and live footage, news events (such as artificial and natural disasters) and live broadcasts of short-term and large-scale events (such as the Olympic Games)(Almalki et al., 2022).

Globally, newsrooms are adopting various forms of AI for newsgathering, production, and distribution. Kothari & Cruikshank (2022) present a research agenda to advance knowledge and understanding of the use of AI in African newsrooms and its implications for journalism in Africa. They reveal the opportunities and challenges it presents to journalists and the theoretical frameworks used to examine newsroom operations. According to Babiak (2023), the Korean news agency Yonhap created an AI system that can write mathematical notes quickly. Soccerbot works based on algorithms that mimic the work of field reporters. This intelligent system's process of preparing materials can be divided into three stages: data collection, content writing, and grammar and spelling checking. Now, AI can perform multi-category tasks in less time than humans can. The famous Washington Post also uses AI technology to collect facts daily. Fox Broadcasting's AI develops sports scripts that appear on the Big Ten Network website. Yahoo employs a similar technique to generate sports reports for many forms of fantasy sports and may deliver this information separately to each user.

1.3.4 Journalism Ethics in AI Era

Journalism has always followed self-developed, attentive standards of ethics in each media business. However, journalists must follow industry-wide ethics. Legal and ethical issues arise when deploying AI in newsrooms. A recent Center for News, Technology, and Innovation paper highlighted that generative AI tools may promote productivity and growth but also raise the danger of erroneous information, copyright misuse, ethical issues, and public distrust. Other precautions apply to this assistive equipment. Organizations utilizing chatbots must ensure that automated replies are accurate, current, and honest about their use. News providers must ensure AI doesn't filter out material and create user biases for user-specific algorithm-recommended articles. In recent years, deep fakes have also raised concerns. Due to stunning footage that was subsequently discovered to be deep fakes, media consumers are skeptical of certain video and audio evidence(Emily, 2024).

Lack of transparency in AI journalism processes is another ethical issue along with algorithm biases. AI bias may damage journalism by perpetuating bad preconceptions and undermining confidence in the media(Somorin & Ademola, 2024). Furthermore, ethics and editorial issues about AI in journalism include disinformation, editorial biases, and lack of human touch. These systems can produce and distribute sensational, inaccurate, or fake news. This can damage news credibility and public faith in journalism. AI in news creation and curation might promote political, racial, and gender biases that reinforce stereotypes and diminish marginalized voices and viewpoints. Media organizations must establish explicit AI rules to guarantee that these systems are visible, responsible, and ethical(Acharya, 2023).

According to Stray (2019), AI can be helpful in investigative journalism by recognizing the appropriate pattern within large data sets, significantly reducing the human effort required to produce investigative stories. There are several reasons why this is difficult, one of which is that access to data is a constant problem. Investigative stories are often unique or 'one-off.' Defining the appropriate style for a 'news story' is a complicated problem, as some (value) news concepts are challenging to translate into codes. We should anticipate social and political controversy if we widely use search algorithms for investigative stories. The purpose of this study is to evaluate the use of artificial intelligence (AI) in journalism, as well as its influence on the morality and quality of information produced by the media.

2. Methodology

2.1 Method

I used the qualitative method, which is utilized to identify explanations for observed patterns, particularly invisible or surprising ones, and to investigate the nature of phenomena, such as their quality, various manifestations, the context in which they appear, or the perspectives from which they can be perceived (Thorne, 2000). This formal definition can be further enhanced by a practical guideline: Qualitative research often involves the collection and analysis of data in the form of words,

rather than numerical values(Lewis, 2018). Although qualitative data analysis tools are accessible, the researcher is the key instrument that deepens their interaction with the data and the people who share their experiences to find these meanings.

Qualitative data analysis can be both deductive and inductive. When the researcher's interest is in specific aspects of the phenomenon and the research question is focused and not general, a deductive approach to analysis may be used(Ravindran, 2019). The basic steps of qualitative data analysis are (Mayan, 2023; Polit and Beck, 2018): Preparation of data, Reading and reflecting, Coding, categorizing and memoing, and Developing themes/conceptual models or theory.

2.2 Semi-structured Interviews

I used Semi-structured interviews to gain insights into a person's subjective experiences, opinions, and motivations – as opposed to facts or behaviors(Hak, 2004). Semi-structured interviews involve the use of open-ended questions and an interview guide that outlines the main areas of interest, perhaps incorporating sub-questions. These areas of interest are often based on existing literature, prior studies, or initial data-gathering methods(Hijmans and Kuyper, 2007). Typically, the topic list is modified and enhanced at the beginning of the data-collecting phase as the interviewer has a deeper understanding of the subject matter(Jansen, 2007).

The authors recruited a few people who fit pre-determined criteria (Journalists) and asked each of them the same questions one-on-one. Semi-structured interviews allow the interviewee to provide additional information the researcher did not ask about(Gibbs et al., 2021). Qualitative interviews provide the benefit of being participatory, enabling the emergence and exploration of unanticipated themes by the researcher. This approach can also mitigate the researcher-centred bias commonly observed in written surveys, which are limited to measuring information that is already known or anticipated to be pertinent to the researcher. Certain interviews were recorded via audio tapes, while others were documented using written notes(Russell and Gregory, 2003).

2.3 Research Ethics

We have informed all participants why the research is being conducted, anonymity is assured, and how the data is stored. The participants have been confidentially considered and fully informed about the aims of the research and if there are any risks associated. We used aliases according to the participants' conditions. Finally, we have consent from all participants for the study procedures.

2.4 Data Analysis

To analyze the data collected through interviews, I transcribed them into protocols and transcripts verbatim. According to Thorne (2000), Qualitative data analysis is a complex and elusive part of qualitative research. Many inherent challenges in the research approach make the analysis process demanding. The first challenge is to convert the data from visual or auditory recording to textual data. Qualitative data analysis can be both deductive and inductive. The deductive process, in which there is an attempt to establish causal relationships, is, although associated with quantitative research, can also be applied in qualitative research as a deductive explanatory process or deductive category application(Mayring, 2023).

Table 1. Participant Information

Participants	Media institution	Position	Experience
1	Television	Producer	12 years
2	Television	News Editor	7 years
3	News website	News Website Manager	5 years
4	News website	Social Media Manager	10 years
5	News Agency	Digital Journalist	6 years
6	Newspaper	News Editor	11 years
7	Radio	Journalist	9 years

The interviews, conducted in the second quarter of 2024, included five face-to-face sessions and two via Zoom. All interviews were held in Arabic to ensure accuracy. Linguistic specialists translated the data into English, and manual thematic analysis was employed to derive the main results, which are presented and discussed with existing literature in the following section.

3. Results

3.1 Fields of AI Employment

The websites mostly employ artificial intelligence, followed by mobile journalism, which has become an independent world that requires textual content, images, design, video, audio, social media platforms, television, radio, and daily newspapers. According to journalists in the media, the field in which artificial intelligence is most used in design and

graphics is followed by its use in processing huge amounts of data. Almost a consensus was that artificial intelligence is employed in graphics and designs, whether in websites, television, or newspapers. Participants also showed:

We frequently utilize artificial intelligence applications in "design and graphics" to create images, process them, and construct various forms necessary for the website's content. In addition, the website includes a chatbot that relies on artificial intelligence techniques [Participant 3]. We frequently use artificial intelligence to create shapes representing news content, particularly those without an accompanying image. Occasionally, we also use it to create shapes that represent statistics, particularly those for which we lack an accompanying image or when specific statistics necessitate the creation of an appropriate drawing [Participant 4]. In the news agency, we utilize artificial intelligence within specific boundaries, primarily creating a suitable symbolic image for the news. We also occasionally use it for chart design or retrieval of an appropriate histogram [Participant 5]. [Participant 5] added that we also use artificial intelligence to process vast amounts of data, sort and organize it, and summarize lengthy texts. At the newspaper where I work, we utilize artificial intelligence applications to a limited extent, primarily for summarizing lengthy texts and conducting news investigations [Participant 6].

3.2 Media Content Topics and AI

The topics of media content in which journalists use artificial intelligence are primarily technological topics, followed by other essential topics such as education, politics, economics, arts, health, sports, and the environment, as journalists and their various institutions indicated:

We deal with many topics on television, and we work to edit the news about them. Political and educational topics often prevail over other topics. Sometimes, we resort to artificial intelligence to sort and summarize political or educational material and investigate its sources [Participant 1]. Political and technological topics make up the most significant proportion of news and television programs, and our technology news frequently deals with developments in artificial intelligence. We also employ artificial intelligence to generate examples, which we display on television [Participant 2]. Today, with the world engrossed in political and security news, particularly those related to the war in Palestine, artificial intelligence is widely employed in creating and designing images, particularly on websites and social networking sites. These images expressed the designer's stance on the war and the victims who fell because of it [Participant 6]. Much news, primarily political and security news, requires us to investigate it and its sources, so we resort to artificial intelligence applications [Participant 7]. In recent years, environmental issues and climate change have gained significant importance and attention from the media. They are second only to today's political and security news. Some television programs or news bulletins use artificial intelligence applications to generate images and diagrams about climate change and environmental disasters such as earthquakes, floods, and extreme heat [Participant 2].

3.3 The Most Widely Used AI Applications

Journalists use many applications and websites for artificial intelligence in their work. Everyone said they hear about new applications, websites, and updated services daily. There is a huge revolution in applications and global competition to create more of these applications with broad services. The goal is clear: more profits, facilitating content extraction, and embracing a new revolution after the printing and Internet revolution. One of the most famous applications was ChatGPT, followed by many applications at the same level, such as Google Assistant, Designs.ai, Art Flow, QuillBot, Grammarly, DeepFake, Word.ai, Chatbots, AI-Writer, Siri, Blockchain, Otter.ai, and others.

Now, at many events and festivals, we have begun to use drones, a high-quality technology used for photography, to help the director cover many areas and angles of the event or drama area [Participant 1]. I usually use multiple AI applications and experiment with them, but I often use ChatGPT, QuillBot, and Grammarly [Participant2]. ChatGPT is our artificial intelligence application for text handling, and we frequently need applications related to language, linguistic proofreading, and text formulation, such as QuillBot and Grammarly. Because we receive English news, we translate it into Arabic and verify it with these apps [Participant 3]. I only use ChatGPT. This application has proven its worth, and I think it fulfils the purpose, especially since I do not need to deal with images, only text [Participant 4]. We use AI applications for text and design, such as Designs.ai, Art Flow, and Copilot. [Participant 5]. Grammarly and AI-Writer are the two applications I use the most in my journalistic work [Participant 6]. Many websites today provide translation and smart chat services, and we have begun to develop our websites to keep pace with developments and changes in the digital environment [Participant 7].

3.4 Implications of AI Employment

Certainly, artificial intelligence is one of the essential features of human development, which reflects on life in its various aspects with greater productivity, ease, speed, accuracy, wealth, luxury, and protection, of course, in addition to other negative repercussions attributed to misuse or misuse or an intention to exploit this development for harm and not for personal or public benefit. Journalism is an important field that benefits from artificial intelligence applications and websites, whether producing content, modifying it, designing videos and photos, building and manufacturing broadcasters, automated reporters, etc. Expert journalists point out that the most important fruits of artificial intelligence in journalistic work are the accuracy of handling information, speed of completion, and enhancing the skills of the human editor as he learns from what artificial intelligence performs in editing or drafting:

Participant [1]: We obtain an accurate analysis of the information and data we receive from various sources through artificial intelligence. In addition to the speed and ease with which media content is completed, previously, we used to spend hours and sometimes days building media content suitable for publication. However, today, within an hour or two, we complete the work using artificial intelligence sites. Participant [2]: The human journalist cannot be dispensed with as he/she is the only one who knows the media institution's agenda; therefore, the communicator is indispensable. In our work, we employ artificial intelligence for accuracy and speed and to obtain high-quality content in record time. Participant [3]: I see artificial intelligence as a natural addition to the development in the world of technology, and nothing is preventing it from being employed in journalism, mainly since it saves effort, time, and money. Participant [4]: It is impossible to remain static while you see members of society using artificial intelligence applications. To keep pace with development and revitalize journalism, you must invest in this new world because it saves you time and effort, and it can also save the high costs required by the number of workers and their supplies in media production. Participant [5]: Investigating news sources and their credibility is the most essential service for me performed by artificial intelligence because we receive much news, and it is difficult for us to investigate all of them traditionally. Participant [6]: The truth is that artificial intelligence saves us a lot of time, effort, and money, but this does not mean that the matter is free of challenges and threats. For example, we remain busy verifying intellectual rights and adhering to publishing ethics. Perhaps this is the most critical challenge in artificial intelligence: investigating much ownership. Content and ensuring that no ethics or privacy is violated, especially in photos, drawings, and statistics. Participant [7]: In addition to accuracy and speed, artificial intelligence applications develop the journalist's linguistic and artistic skills through performance, paraphrasing, linguistic proofreading, and so on that he sees.

4. Discussion

AI technology is a significant advancement for numerous industries; however, it could also pose a substantial threat to the media industry. The detection of counterfeits is exacerbated by the rapid learning and evolution of AI systems. As a result, the media's work will be substantially complicated, as media materials are becoming more questionable, and each image must be carefully examined. The entire media industry is compelled to navigate the complexities of modern artificial intelligence, which is capable of fabricating false media materials, modeling various sources, and falsifying data. This includes the creation of phony images and videos.

The results showed that the fields of employing AI were design and graphics, dealing with big data, and reformulating content and written texts to suit the nature and language of readers. Journalists resort to it to save them effort and money, as it often requires specialized and expensive training courses, and therefore, AI applications compensate those who have little experience in designing, dealing with data, and reformulating in this regard, according to De-Lima-Santos & Ceron (2022).

Among the areas being developed further in the news media through AI mechanisms and applications are machine learning, computer vision, planning, scheduling, and optimization. According to Babiak (2023), AI is an ideal tool for improving the speed of information collection, analysis, and generation. Many main media outlets already use AI in their workflow(Babiak, 2023). AI represents a valuable tool for "tracking large data sets and creating generated images and videos that no longer require specialized skills and equipment" (Bentivegna & Marchetti, 2018; Jamil, 2020). This result is also consistent with what was indicated by Babiak (2023), which showed that news organizations in America, for example, are already using AI systems to gather and analyze data from varied sources and integrate this data into articles, as they did during the US presidential elections in 2016. The technology has spread more than 500 reports. According to Stray (2019), AI can be helpful in investigative journalism by employing it to "recognize patterns" within large data sets of public interest, significantly reducing the human effort required to produce investigative stories.

According to the results, the media content topics in which AI is employed are mainly: Topics: "Technical,"

"Educational," "Economical," and "Industrial." These topics are witnessing a significant expansion in the digital environment and the repercussions of the Fourth Industrial Revolution on most fields of life. However, educational or economic topics, for example, have become a future environment for tremendous developments in scientific research and its fields, scientific applications, circulation and commerce, etc. AI is no longer limited to one field alone, as this is subject to the target group, its field of work, and its environment. In any case, its uses vary according to the subjects, primarily educational and economic.

The result was indicated by the Ginimachine website in 2022 when it referred to the uses of AI by topic, indicating that it is commonly used in many fields, most notably banking and finance. Customer service, risk assessment, financial services marketing, and data analytics. It is also used in health, statistical data, and risk assessments. Its techniques enable doctors to analyze risks and control epidemics. AI improves customer service through rapid response and other communication technologies. It is also used in agriculture and industrial management to identify trends, forecast, and improve productivity. AI and predictive analytics also help make insurance decisions by analyzing user data and drawing meaningful conclusions. AI is rising in the travel and hospitality industry, as AI can book flights and estimate prices. AI-powered robotic assistants can also assist customers in airports and hotels(Ginimachine, 2022). Other studies have shown that many news agencies have employed AI applications in data collection, content writing, and grammar and spelling checking(Babiak, 2023). In addition, the Korean news agency Yonhap developed a Soccerbot AI system that replicates the work of field correspondents.

Many AI applications and websites are used to build media content, notably ChatGPT, Google Assistant, Designs.ai, Art Flow, QuillBot, and Grammarly. Most of them seem related to editing, proofreading, and redrafting the text, as the sample's work is in editing, journalism, and the media, which focus on the text, building the phrase, and editing and revealing the news. There is no doubt that dozens or even hundreds of AI applications are used today in various fields, but what is mentioned here are the most widely used among journalists. In general, AI applications are growing steadily, and according to a report published by the "Enterprise Apps Today" website, 35% of companies in the world use AI, and 66% of companies plan or use AI to achieve their sustainability goals. 87% of companies worldwide believe that AI technology will help them achieve a competitive advantage, and AI has grown over the past five years by 300% around the world (Elad, 2024). The report also showed that from 2022, only 28% of people fully trust AI. The advancement of AI will reduce 85 million jobs, but at the same time, 97 million jobs will be created. The report added that about 64% of consumers are willing to provide their data to AI to improve the overall experience. By 2025, AI statistics indicate that 100 million people will work in the AI industry. AI tools have replaced 9% of companies around the world. It is estimated that by 2030, intelligent robots will replace 30% of the global workforce. The report indicated that 77% of devices worldwide already use at least one AI feature. As of 2022, 92.1% of companies have seen positive results after implementing AI technology in their business operations.

The most important implications of employing AI on the quality of media content are the accuracy of data analysis, accelerating the editing process, and enhancing the (human) journalist's skill in editing and drafting. It indicates the effectiveness of AI applications in journalistic work, which improves the quality of journalistic text and journalistic material and its commitment to content quality. On the other hand, there were fewer positive effects of AI on the credibility of the source, journalistic ethics, consideration of copyright, originality of the idea, and anticipating the future of events, meaning that AI did not directly enhance the journalist's ethics, or consider intellectual or journalistic rights, and this in some way is not the limit. The bad thing is that the ethics and controls of AI media content are still primarily subject to user ethics.

According to (Huang et al., 2023), The widespread application of AI and its deep integration with the economy and society have improved efficiency and achieved benefits. However, it will inevitably affect the existing social order and raise ethical concerns. The ethical issues, such as privacy leakage, discrimination, unemployment, and security risks, brought about by AI systems have caused significant problems for people. Therefore, the ethics of artificial intelligence. Many recent studies and articles have shown that AI affects the ethics and quality of media content unless some limits are set. As a quality implication, AI may produce similar content repeatedly, or AI may not be well suited to crafting compelling stories or creating content that embodies the truth(Ferreira, 2023). As well as the possibility of artificial intelligence-generated content violating intellectual property rights. It is unethical if the content is designed to manipulate the audience(AIContentfy, 2023a). In the context of impacting ethics, the AIContentfy website pointed to bias and discrimination as the primary ethical concerns associated with AI in content creation, especially when the AI algorithm is configured with biased data(AIContentfy, 2023b), and the content may lack the value of creativity and the human touch(P. Kumar, 2023; K. Sawalha, 2023).

5. Conclusion

The article revealed the implications of employing AI on the quality of media content creation. The results showed that

the fields of employing AI were design and graphics, dealing with big data, and reformulating content and written texts to suit the nature and language of readers. The results also showed that the media content topics in which AI is employed are mainly Technical, educational, economic, and industrial topics. The results revealed that the media in which AI is employed are digital platforms, websites, mobile journalism, social media networks, and advertising screens. Additionally, the results showed that the AI applications and websites used in building and drafting media content were all close to the average level, such as ChatGPT, Google Assistant, Designs.ai, QuillBot, and Grammarly. The positive impacts of AI on the quality of media content have been the accuracy of data analysis, the acceleration of the editing process, and the enhancement of the (human) journalist's skill in editing and drafting.

The authors recommend conducting more studies on the use of AI in preparing fake and misleading news stories published on social media platforms. They also recommend universities establish an artificial intelligence unit as a research center to serve academics and researchers.

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