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## Artificial Intelligence and the Reshaping of Journalism

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**Abstract:** *Incontestably, the continued advancement of artificial intelligence (AI) has transformed many industries, including journalism. AI continues to take over traditional ways of journalism in Pakistan in a similar way as in other parts of the world (but at a slower rate). It has revolutionized journalistic practices in Pakistan. This study investigated the role of artificial intelligence (AI) in reshaping journalism in Pakistan. This research used an interview method. A sample size of 15 journalists was drawn using the purposive sampling method. A carefully constructed questionnaire was used to collect data from defined participants. Additionally, to conduct a thematic analysis of recorded interviews, different categories and subcategories were used. The findings of the study reveal that despite having a transformational role in Pakistani journalism, AI Adoption still needs certain considerations to improve the standards of reporting in a polarized society like Pakistan. Although Pakistani journalists are somewhat knowledgeable about AI technology, more instruction on the moral implications of its application in journalism is necessary.*

**Key Words:** Artificial intelligence, Journalism, AI tools, Automation

### Introduction

Two definitions of artificial intelligence (AI) are commonly used, both of which are somewhat paradoxical. Artificial intelligence, on the one hand, is intelligence that imitates human cognition and/or behavior. Artificial intelligence, on the other hand, is the antithesis of natural intelligence or human intelligence. The first kind of definition assesses AI's performance "in terms of fidelity to human performance," according to Russell and Norvig, whereas the second type assesses AI's performance "against an ideal performance measure, called rationality." In the first method, known as "a human-centered approach," scientists evaluate whether artificial intelligence behaves or thinks like a human. In the second method, known as "a rationalist approach," scientists evaluate whether artificial intelligence behaves or thinks rationally (Simon, 2023).

The way news organizations use AI for production and distribution, as well as how AI systems use news content to learn, is facing new ethical and legal challenges as a result of technological advancements. Using generative AI tools in newsrooms can boost creativity and productivity. Simultaneously, there is a chance of errors, moral dilemmas, and a decline in public confidence. Additionally, it offers chances for journalists' original work to be misused in violation of copyright. Lawmakers will need to provide precise definitions of AI categories and disclosure requirements for each in order to address these issues (Miroshnichenko, 2018).

Recent developments in artificial intelligence (AI) technology have led to a notable revolution in the field of journalism. Artificial intelligence (AI) has emerged as an effective tool that is transforming the way news is gathered, produced, and distributed. Algorithms operated by AI have renovated news gathering by

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effective categorization through huge amounts of data from various sources. AI is equipped to track news stories, social media trends, and other online content in real time, assisting journalists in getting a thorough rundown of the most recent happenings. The main players in the news are platform corporations like Microsoft, Google, Amazon, and Meta. They also control the majority of artificial intelligence research, development, and application (Simon, [2023](#)).

News production is being automated, which is one of the biggest ways AI is affecting journalism. These days, news articles, summaries, and even video content can be produced by AI-powered algorithms with little assistance from humans. This not only expedites the news production process but also makes it possible to allocate resources more effectively because journalists can concentrate on telling more intricate and in-depth stories. For example, the BBC has been experimenting with AI-generated video summaries of news events, and the Associated Press has been using AI to automatically generate financial news stories (Frackiewicz, [2023](#)).

The notion of "artificial intelligence," as it is currently understood, dates back to the mid-1900s. The British mathematician Alan Turing developed the Turing test, a thought experiment that serves as the cornerstone of artificial intelligence philosophy, in an effort to address the question of machine intelligence in his 1950 paper *Computing Machinery and Intelligence*. The age-old query, "Can machines think?" (p. 433), is becoming more and more relevant. The machines were capable of independent learning and development. In reality, a lot of Turing's predictions have come to pass. As an illustration, consider the fact that machines will compete with humans in almost every intellectual endeavor, including chess! The fact that the computer program AlphaGo defeated the best human player is compelling evidence of what artificial intelligence is capable of (Yu, Huang, & Jones, [2020](#)).

The collecting and verification of news is another area where artificial intelligence is making a splash. Journalists can find patterns and trends in massive amounts of data, as well as authenticate sources and information, with the aid of AI-powered tools. In the era of social media, where false information and fake news can spread quickly, this can be especially helpful. AI can also be used to track trending topics and breaking news on social media platforms, giving journalists the ability to report on stories as they develop and stay ahead of the curve (Diakopoulos & Koliska, [2017](#)).

Before we continue, it's helpful to grasp how AI has evolved through these sensitizing concepts. Narrow AI, sometimes referred to as "weak" AI, lacks emotions and self-awareness. Its programming ensures that only one task—such as gathering information for news reports—is completed at a time. We are still in the narrow AI era right now, and this study primarily discusses this kind of AI. It is believed that general artificial intelligence, or "strong" AI, is capable of making decisions comparable to those made by human intelligence. General AI is intelligent and has human emotions, including sentiment, self-awareness, and even cross-cultural awareness. However, super AI is expected to surpass humans in every way, including creativity and multitasking abilities (Jajal, [2018](#)).

Concerns regarding the development of artificial intelligence have been voiced by some of the most well-known professionals in the field. Scientist Stephen Hawking issued a warning, saying that unless humans are ready for the potential risks posed by AI, it could turn into the "worst event in the history of our civilization" (Linden, [2017](#)).

With the development of computer language processing technologies, artificial intelligence (AI) is gradually making its way into a variety of industries, including finance, healthcare, security, retail, education, aerospace and autopiloting, and perceptual, cognitive, and complex cognitive AI. It focuses on the potential for enormous economic gains and the media industry's enormous user appeal. The approach is generally well received by media organizations, who recognize the potential benefits of this development; however, the emotions of the individual journalists are given less consideration (Carlson, [2016](#)).

The idea that artificial intelligence will eventually replace humans is the final step toward McLuhan's concept of media as "extensions of man." Over the course of human evolution and civilization's development, media have expanded and enhanced a variety of human faculties. According to this theory, the development of artificial intelligence is a natural byproduct of the advancement of media. Conversely,



if Teilhard de Chardin's theory of mega-evolution is accepted, the development of media inexorably leads to the emergence of artificial intelligence, at least in the human stage of evolution (McLuhan, [1964](#)).

The most obvious uses of algorithms in journalism are in the processing of large data sets and the search for necessary information. All types of data are becoming more and more available. Retrieving pertinent data from databases is obviously helpful to journalists, as it allows them to discover connections and occasionally causal relationships that they otherwise would not have discovered. Nonetheless, there are already documented instances of data mining that are even more complex and journalistically focused. For instance, the Interactive News team at the New York Times developed an app that uses a photo to identify the faces of Congressmen. The app initially assisted reporters in determining "which member you've just spoken with." The implication is that, as robots frequently do, the algorithm makes up for human incapacity or laziness. However, given that there are 535 members of Congress who are chosen on a rotating basis, members of the Times Interactive News team maintain that the issue merits extra attention. Thus, the program seeks to support fact-checking and boost reporters' confidence (Kim H., [2019](#)).

As is common with new media technologies, after being designed to fulfill the roles of older media for a while, they soon discover their own superpowers and transform how people use them. The congressperson's facial recognition application quickly gained the ability to carry out a detective's work after it was able to match a speaker's photo to a database. Once the program matched a collection of images pulled from social media, it assisted a reporter in identifying which congressmen were attending a significant event. The reporter received a crucial cue that they would not have been able to get otherwise (Jeremy, [2018](#)).

The focus has shifted from data collection and processing to data representation due to the phenomenal growth of available data. There is so much data available that it is difficult to comprehend even after it has been reduced and processed. "Things are still quite complicated because we have more data available than before, but it is often difficult to interpret and use with journalistic tools." Since the revelations of data journalism frequently go beyond what readers can comprehend in text form, data-driven journalism, also known as data journalism, is evolving alongside data visualization and has been influencing new media sections and genres. Comparatively speaking, newsrooms have advanced significantly beyond basic data processing and search. Algorithms can generate ready-to-publish textual and non-textual news products of a highly specific kind, in addition to providing basic analytics for human journalists to evaluate (Bouchart, [2015](#)).

Journalists must realize that artificial intelligence cannot take their place. However, it can take away some of the monotony of daily life so you can concentrate on your strengths. When fragments of information are combined to create an article with ChatGPT, it will be more frequent than a human-written, thoroughly researched piece. While many Pakistani journalists have not yet used ChatGPT for professional purposes, it will be interesting to observe their response. Until ChatGPT starts to use user-selected local languages, such as Urdu, in Pakistan's mainstream media, it might take some time before it becomes a regular feature in Pakistani journalists' daily work. AI-generated content with human-like expressions, however, could gain popularity on social media. It is difficult for people to tell whether AI or humans created and distributed the content targeted at journalists as a result of this practice. To make matters worse, it will be challenging to hold people accountable if AI-generated content is shared on social media platforms by bots (Naqvi, [2023](#)).

Over the last twenty years, advances in technology have completely changed the news media landscape in both developed and developing nations. The introduction of automatic artificial intelligence processes into various aspects of news production and dissemination is causing a transformation in journalistic practice, particularly in large economies. In the role of communicators, machines and devices are currently replacing journalists. Analyzing whether artificial intelligence has started to affect technologically advanced journalistic practices and newsrooms in low-income countries is crucial (Jamil, [2021](#)).

By fixing tiresome errors, technology increases productivity in the media sector. It's likely that language in journalism will get better, with better headlines and fact-checked information. The recent acceleration of the introduction of technologies as a means of running or managing media systems is, in

Pakistan's context, a game changer, or at the very least, a factor that is having an unprecedented impact on media. Looking at the state sector, it is evident that the state is not concerned with planning how to use AI or trying to understand its impact. This may not be a bad thing for the time being, as the state's natural tendency is to use AI frequently, either to push agendas that are frequently not in the public interest or to first state their media agendas (Rasheed, [2023](#)).

## Objectives

- To analyze the way AI is reforming journalism in Pakistan.
- To study the effects of AI on the quality of journalism in Pakistan.
- To find the level of AI penetration in Pakistani journalism.

## Research Questions

1. What is the impact of AI on journalistic practices in Pakistan?
2. What is the level of AI adoption by Pakistani media/journalists?

## Literature Review

Machines with artificial intelligence can think and learn (Newman, 2018). Globally, the media industry has embraced artificial intelligence (AI) due to its potential for improved audience engagement, increased efficiency, and personalized content creation (Kaplan, [2016](#)).

It's still early days for many Pakistani journalists to learn how to use ChatGPT at work. It will take some time before ChatGPT becomes a regular part of Pakistani journalists' daily work when it starts to use local languages for the users, such as Urdu in Pakistani mainstream media (IFJ, [2023](#)).

AI has opened up enormous opportunities for a number of industries, including journalism. In the process of producing news, the role of journalists has changed significantly over time, largely due to AI-powered news-writing bots and other technologies. Nevertheless, integrating AI into journalism also brings up ethical issues that must be resolved to guarantee its responsible use in journalism, as well as worries about employment displacement and the loss of human touch in reporting. Artificial intelligence (AI) in journalism is relatively new in Pakistan, and little is known about how journalists feel about its application (Khurshid & Bhadur, [2023](#)).

A journalist's job is vital and will never change. The way they practice their profession will shift to one that uses a model that blends research and technology to produce better outcomes (Whelan, [2022](#)).

AI is being used in a number of media production and delivery processes, including advertising, content distribution, and content creation. Automated video editing and natural language generation (NLG) are two examples of AI-powered content creation tools. Financial reports, sports match reports, and news articles and summaries have all been produced using NLG software (Underwood, [2019](#)).

Automated video editing software is also getting popular among users, and a number of short videos have been produced and posted on different social media platforms. Thus, user-generated content has been facilitated by AI tools (van Dalen, [2012](#)).

In Pakistan, automated advertising is gaining popularity due to its systematically improved sales and purchases. One study found that such automation of advertising has widely increased the popularity of AI tools in marketing and advertising due to its quick buyer engagement and reach (Kim & Kim, [2021](#)).

Khurshid & Bahadur ([2023](#)) found that the study's participants provided varying opinions about the potential benefits and difficulties that artificial intelligence in journalism may bring. The study observed that the majority of participants opined that AI has the potential to improve news reporting and ensure accuracy and speed; however, others voiced concerns about AI systems automating a number of tasks and replacing human labor, leading to job losses. They also suggested that careful monitoring is required as AI needs to be incorporated into journalism in order to assist humans, not completely replace them. Likewise, findings also reveal the importance of providing extra instructions and training on the moral as well as ethical complications of AI journalism. A considerable number of journalists responded that they strongly



believe in their own abilities and the potential of AI integration in journalism. However, they remained uncertain about the ethical concerns of AI usage. This demonstrates the need for training programs created to give journalists the abilities and information they need to handle the moral issues raised up by the use of AI.

The media has experienced swift and unprecedented changes due to the remarkable advancements in information and communication technologies (ICTs). These technologies not only spur innovation but also have a role in modernizing and revitalizing journalism practices. Global media companies are dealing with a number of challenges brought on by the publishing industry's dramatic shift to digital media (Waleed, [2019](#)).

Undoubtedly, AI is gradually permeating all multi-creative fields, including journalism, which is currently impacted, especially in light of ongoing economic upheaval and the shift to digital media. We can state that the advancement of AI techniques has significantly changed newsrooms in this way, particularly in terms of all aspects of news production and distribution. Almost three-quarters of respondents to a survey conducted by Reuters for "Media Trends and Technology Expectations in 2018" stated that they use artificial intelligence (AI) in their production. AI is being used in a wide range of industries in the twenty-first century, including video games, health, cars, finance and economics, auditing, advertising, journalism, and many other media and communication domains. AI is now essential to solving problems in operations research, software engineering, and computer science. Thus, AI can be associated with a wide range of fields where human productivity can be higher (Santosh, [2020](#)).

In the past the term artificial intelligence (AI) was coined in the latter half of the 1950s to avoid the overwhelming desire to acknowledge programming, hardware, or other elements with human-level intelligence. The goal of AI was to focus on something different from what is typically assumed: the enormous degree or scholarly limit of human reason and thought. Over the last two decades, there has been a significant advancement in both industry and intelligence, with a growing desire for human-like artificial intelligence, also known as "intelligence augmentation" (IA). Here, information and computation are employed to produce advantages that broaden human understanding and imagination (Saad, [2020](#)).

Every aspect of society is being significantly impacted by the rapid advancement of artificial intelligence (AI); since mass media is one of the most significant sectors of the economy, it must collaborate with innovation to remain relevant. The day is not far off when machines, or robots, will carry out human tasks; this will make work easier, faster, and even more efficient than it would be for humans. AI, also referred to as machine intelligence, would govern this era. It is believed that almost every facet of human enterprise will see a shift away from humans and toward machine labor. Given its ability to significantly increase efficiency and richness in content production, artificial intelligence (AI) has a place in the human-dominated newsroom. It necessitates the use of computer systems fed by journalists with data and algorithms that can automatically extract news from historical patterns and formulas that the audience can understand (Ruiz & Manfredi-Sánchez, [2019](#)).

AI is used in modern newsrooms on all fronts: from arranging stories before shooting to using cutting-edge machinery to capture the exact shot that a producer and reporter want, all the way up to transcribing and translating news in real-time. Newsrooms can now compete for tasks in minutes by automating news, extracting data, and promptly verifying facts. Additionally, the method of covering live news events has changed from large live news coverage setups and OB vans to using a backpack or even a smartphone. AI is everything. Although the term "artificial intelligence" is often used in the media, it refers to something more complex than a machine that can mimic a human. AI can have an impact on every step of the news creation process in journalism, which can be divided into three main categories: story production, story distribution, and story discovery. Similar to data journalism as a field, the story discovery process typically involves using facts to reveal leads, points, and reporting topics. AI is used in story creation to assist in the production of stories. For example, AI greatly aids in both writing and data visualization. In this regard, story movement AI can be more effectively employed as a tool to help arrive at stronger arguments and distribute content to the audience of the organization (Kim H., [2019](#)).

The print is no longer available. Ownership and centralization of cross-media will become dominant. Digital is the way of the future. Next, artificial intelligence (AI) has emerged. There is a continuous

discussion concerning the future of journalism. Although technological innovations have the potential to enhance systems and output at minimal costs, there are always opposing viewpoints. The other argument is that employment will be lost as a result of digitalization and artificial intelligence (Afsar, 2020).

In Pakistan, this has partially held true. Although precise figures are not available, in 2018 alone, over 2,500 journalists lost their jobs. Automation is predicted to cause the loss of about 50% of jobs. This is the turning point. We are only able to prepare for the shift. However, over time, this is what happens to everything and everything. The old mechanisms must give way to new ones as they emerge. The only thing that is constant is change. To stand the test of time, one must adjust, change with the times, and move forward; otherwise, they will become a thing of the past (Afsar, 2020).

## Methodology

The interview approach was used as part of this study. After conducting interviews with fifteen journalists who are employed in Pakistan's media business, the replies were recorded for the purpose of analysis. This was done in order to discover unclear and significant issues discussed throughout the interviews. In order to accomplish the purpose of the research, the questionnaire was meticulously crafted and included the majority of the pertinent questions throughout its whole. Various categories and subcategories were developed for the purpose of conducting data analysis.

**Table 1**

| Category                        | Subcategories  |
|---------------------------------|--|
| Familiarity with AI             | What is AI?<br>Use of AI in journalism<br>AI Journalism and Pakistan   |
| AI usage experience             | Difference between traditional and AI journalism<br>Frequency of AI usage<br>AI tools used by journalists in Pakistan  |
| Benefits of AI journalism       | Increased efficiency in content production<br>Enhanced audience engagement<br>Personalized content creation<br>Improved accuracy in data analysis<br>Fact-checking |
| Risks of adopting AI journalism | Biases in AI algorithms<br>Fake news<br>Disinformation<br>Inability of decision-making<br>Data privacy and security concerns                                       |
| Overall Impact                  | Positive<br>Negative   |

## Findings and Discussion

### Familiarity with AI

Algorithms and artificial intelligence (AI) have transformed many industries, including journalism. Artificial intelligence (AI)-driven technologies are revolutionizing news gathering, analysis, and distribution in the current digital era. The future of journalism is being significantly shaped by artificial intelligence (AI) and algorithms, from personalized news recommendations to automated content creation. Most respondents found the new term "AI journalism" relevant. They believed that AI-based technologies have created tough competition for traditional ways of reporting news. Almost all the participants agreed that Pakistan lags behind in terms of adopting technology. Journalists believed that they had witnessed comparatively less engagement with AI tools in journalistic practices. With little assistance from humans, AI-powered algorithms can produce news articles, reports, and even quick films. Large volumes of data are analyzed by these algorithms, which also extract pertinent information and produce logical stories. News organizations can cover a wide range of topics and deliver news in real time thanks to automated



content creation, which also saves time. However, there are still issues with bias, accuracy, and the absence of human judgment (Ruiz & Manfredi-Sánchez, 2019). Participants in the interview believed that journalists can find hidden patterns and insights in massive datasets by utilizing AI and algorithms. Fact-checking, data analysis, and investigative journalism can all benefit from the use of AI algorithms because of their capacity to handle enormous volumes of data. Journalists can concentrate on in-depth reporting and storytelling by automating tedious tasks. However, ethical standards are required to guarantee the responsible application of AI in journalism.

### AI Usage Experience

Participants in the interview were asked about their experience with AI journalistic tools. Most of them observed that ChatGPT is the most frequently used AI tool to aid journalism. Additionally, they also observed that they have experience with automated video and audio editing tools from AI. They also believed that with the help of AI, like many others, they had created their own channels on social media platforms. AI tools have helped them search for information and news easier than before. Similarly, they also believed that the gathering and verification of news is another important area where artificial intelligence is transforming the landscape of journalism. Journalists can access patterns and trends in huge amounts of data and additionally validate sources and information with the help of AI-assisted tools. In the era of social media, where false information and fake news have a greater tendency to spread quickly, AI can be especially helpful. It is also used to search for trending topics and leading stories, such as breaking news, on social media platforms, enabling journalists to report on stories as they happen and stay ahead in developing reportage. AI is changing not just how news is produced and gathered but also how news is consumed. According to their reading preferences, interests, and even geographic location, individual user news content can be customized by personalization algorithms. Participants also observed that, in addition to providing media organizations with helpful insights into user behavior and choices, AI is of great significance in providing their audiences with more appropriate and interesting content. Moreover, AI-generated voice assistants and chatbots can ensure more conversational and interactive news experiences by allowing users to raise queries and get personalized news updates promptly (Frąckiewicz, 2023).

### Benefits of AI Journalism

AI algorithms have changed the way people consume news and information communicated through media platforms. AI algorithms that have the ability to examine user-generated data and preferences can lead to personalized content recommendations based on each user's unique interests. In this way, news channels can provide their consumers with more relevant content, which increases reader engagement and loyalty (YellowBrick, 2023). Participants in the interview related the different benefits of AI tools that are used in Pakistan. Apart from certain concerns about the usage of this tool, it has transformed the way news is created. Moreover, news organizations are using chatbots and other virtual assistants powered by artificial intelligence to interact with their audience. These chatbots have the capability to converse with users, answer queries, and provide customized news updates. Chatbots help to improve the user experience by utilizing machine learning and natural language processing in order to provide quick responses. However, it is crucial to preserve authenticity and ensure the accuracy of the data that chatbots produce. Also, sampled reporters opined that the emergence of false news has made AI algorithms for fact inspection able to identify the truthfulness of content. These algorithms can detect false information, evaluate the reliability of sources, and focus on any discrepancies. Journalists can confirm the accuracy of their reporting by confirming information more quickly by automating the fact-checking process. Yet, it is essential for journalists to learn AI systems to recognize intelligent variations of false information.

### Consequences of Implementing AI Journalism

Even though being linked with managing benefits, merging AI tools in journalism furthermore leads to a few concerns. A greater reliance on algorithm-based journalism and the use of tools powered by artificial intelligence, according to the opinions expressed by those who took part in the interview, raises significant ethical concerns. When inquired from the sampled journalists of the study, they opined that the use of AI by journalists and news bodies should confirm transparency. Similarly, any automated content formation must be declared, and journalistic guidelines such as truthfulness, equity, and responsibility must be

incurred. To encourage honest coverage and avoid algorithmic biases, diversity and inclusivity are also important. As it is noted, AI-generated texts lack contextualization, which can generate serious concerns. Though the AI has the facility to gather and examine data, it is unable to understand the social or cultural context in which it is being applied. Respondents, too, trusted that another important concern in this regard is the lack of ability of AI to take journalistic integrity into account. It is the duty of journalists to respect objectivity, fairness, and integrity while covering. AI lacks the possibility of moral or ethical decision-making, which increases the prospects of biased or untrustworthy information penetrating the people (Henke, 2023).

Similarly, all of the respondents believed that in journalism, human intuition is extremely valuable. Skilled journalists are able to comprehend complicated subjects, provide context, recognize subtle cues, and reach well-informed conclusions. Conversely, artificial intelligence is predicated on rigidly defined rules and algorithms. It might not be able to fully comprehend the ramifications of events or the intricate subtleties of human stories. AI systems may make mistakes in their analyses or overlook crucial information in the absence of human intuition.

### Overall Impact

According to the respondents' conclusions, the view of journalism is going through a transformation due to the combination of AI tools and algorithms. Technological tools help in the construction of content that is automated and present a number of advantages, such as significant efficiency, amended fact-checking, and maximum audience engagement. But problems like algorithmic biases, moral and ethical concerns, and other bad outcomes in traditional journalism need focus. In the digital age, several news organizations can use AI-powered tools to deliver accurate, timely, and appealing news by integrating AI into a more responsible approach while adhering to journalistic principles and values. No doubt, AI has excellent potential to improve the way journalism is practiced. However, it is crucial to identify the risks and limitations linked to it. Among the difficulties that ought to be overcome are the lack of contextualization, compromised journalistic ethics, the absence of human intuition, and the reinforced biases. So, integration of AI into journalism requires careful consideration to guarantee that the technology complements human journalists rather than simply replacing them, although keeping in view the fact that ethical reportage still needs human finding, empathy, and ethical responsibility.

Pakistan is the fifth largest country in the world by population. 64% of the population is under 30 years old. With such a large youth population, the use of new technology can help the country encapsulate the economic benefits in every sector. But it does require a plan.

### Conclusion

AI plays a captivating as well as complicated part in determining the future of media studies and journalism. AI-assisted tools and techniques are generated with built-in potential to completely transform media and journalistic practices and the ways news is gathered, produced, and consumed by media viewers. AI-operated tools are getting more and more improved, enabling journalists to get the best out of them. But it's crucial that researchers, media professionals, and journalists often take AI critically and consider more of the moral consequences related to its usage. With this approach, fundamental principles of media studies and journalism can be preserved while simultaneously utilizing AI to create a more effective, interesting, and perceptive media culture. Although Pakistani journalists are somewhat knowledgeable about AI technology, more instruction on the moral implications of its application in journalism is necessary. The participants of the study stated a strong desire to learn more about artificial intelligence in journalism, demonstrating a need for more research and improvement in this field. This kind of research could assist in viewing the uses of AI in journalism while considering moral issues and effects on Pakistani media. Overall, this study suggests the need for more education and training on the ethical implications of AI and presents shrewd information about how it is currently being adopted and used in Pakistani journalism. The findings of this study also show that although artificial intelligence (AI) is already beginning to appear in Pakistani media, there is still an opportunity for the technology to be adopted more widely. Participants expressed a range of opinions about the possible benefits and difficulties of using AI in journalism. Consequently, its incorporation in journalism needs to be carefully managed so that it can





assist humans rather than completely replace it. Moreover, this study also provides a potential guide for future investigations and research regarding AI integration in media and journalism. Particularly, it guides AI's incorporation into Pakistani media in ways that promote ethical standards and improve journalistic practices.

### Research Gap

- Insufficient Consideration of Ethical Implications.
- Inadequate AI ethics training is provided.
- A Yearning for Greater Understanding Among Journalists.
- Balancing Human Involvement with AI Integration.
- AI Adoption in Pakistani Media Is Limited.
- Directions for the Ethical Integration of AI.

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