



CHANGES IN THE TV NEWSROOM WORKING MODEL: IMPACT OF AI TO DISRUPT TRADITIONAL JOURNALISM MODEL

Dr Sobia Abid

*Assistant Professor, Department of Film and Broadcasting, University of
the Punjab*

Areeba Bint-e-Saeed

*MPhil Scholar, Department of Film and Broadcasting, University of the
Punjab*

Abdul Wahhab Dawar

*MPhil Scholar, Department of Film and Broadcasting, University of the
Punjab*

Neelam Sitara

*MPhil Scholar, Department of Film and Broadcasting, University of the
Punjab*

Abstract

This study tends to investigate the changes in TV newsroom working model due to AI and how AI is disrupting the traditional Journalism model. World is moving to an AI-driven society which is impacting the news production process of almost every newsroom. Newsrooms moving to AI also raises ethical concerns for journalists which is also discussed in this study. Drawing on theoretical foundation on Theory of Disruptive Innovation (1995) and Theory of Technology Acceptance Model (1986) examines that AI-driven tools help newsrooms in automated news generation, increased efficiency and accuracy which is impacting the traditional journalism model. 25 in-depth interviews have been conducted from director news, controller news, head of assignment desk, head of packaging desk and head of creative department. Our research questions explore that how AI use started in Pakistani media, how it is changing the newsroom working model, does it have good or bad impact and what are the future perspectives of AI integration in Pakistani newsrooms.

Keywords: Newsroom, Artificial Intelligence, Use of AI, Pakistani Media, Mainstream Media

1. Introduction

Artificial Intelligence (AI) is significantly reshaping journalism, impacting news production, content delivery, and audience engagement (Wenger et al., 2024). The integration of AI in newsrooms brings both opportunities and challenges, influencing the roles of journalists and the quality of news outputs. Generative AI tools are being used across news reporting processes, particularly in news production and distribution. These tools improve efficiency and data handling, but raise concerns about accuracy, credibility, and algorithmic bias.

AI offers potential benefits to journalism, including augmenting tasks, simplifying technical documents, and providing visual illustrations (et. Al., Schapals and Porlezza. 2020). AI can support various tasks across the news production pipeline and enhance productivity. By automating repetitive processes, AI can free journalists to focus on qualitative reporting, investigation, and in-depth analysis. Some suggest AI may lead to a return to the essence of journalism, moving away from journalists as mere fact transcribers.



AI's impact extends to the very structure of news organizations and the relationships between news outlets, their workers, and their audiences. The advantages of AI include augmenting journalistic tasks, simplifying newsworthy technical documents, and visually illustrating articles. AI can support a variety of tasks across the news production pipeline, enhancing overall productivity⁸. For example, Natural Language Generation techniques can substantially reduce the time required to complete repetitive tasks, freeing journalists to focus on in-depth analysis and qualitative reporting. Some experts suggest that AI may even facilitate a return to the essence of journalism, shifting journalists away from merely transcribing facts.

AI is being deployed to facilitate automatic translation, launch news-recommendation systems, analyze data, and optimize content distribution. Newsrooms are exploring AI's capabilities in news detection, automatic writing, and content personalization.

1.1 Objectives

The main objectives on which the process of research took place are as follows:

- 1) To find out the usage of AI tools in Pakistani TV newsrooms.
- 2) To study how AI tools have changed the working model of TV news channels in Pakistan.
- 3) To analyze the use of AI for the development of journalism or demolition to Pakistani contemporary media.
- 4) To discover the future of the modern mainstream media regarding AI tools.

1.2 Research questions

Some main questions which are kept in mind for the process of research had been taken place are as follows:

- 1) Is there any use of AI TV newsrooms?
- 2) Has AI changed the working model of newsrooms?
- 3) Is the use of AI good or bad for newsroom?
- 4) What are the future perspectives of AI use in Newsrooms?

2. Literature Review

Holland (2015) demonstrate that we are living in the Post-industrial era, the Information Age, which has led us to technological development, and these technologies have moved us to the process of digitalization . Toffler (1980) called this information age as the third wave. Artificial intelligence is the result of these advancements and now every industry is maneuvered by the possible use of AI (Pan, 2016). Artificial intelligence has also affected newsrooms by increasing the efficiency of news production, generating high-quality text and images, and advancing fact-checking and authentication.

According to Martin (2019), AI use is not as intriguing as it is in Western newsrooms. Forbes uses Bertie, a tool used to generate the first draft for news pieces. The LA Times uses AI to report earthquakes and track homicide information in Los Angeles Another daily newspaper The Washington Post uses Heliograf, an AI-generated reporter, to create news stories. Bloomberg is a global provider of financial news, Cyborg, which analyses large sums of business news immediately and creates AI-driven news stories. Dow Jones and Reuters are using automated report coverage of the stock exchange and its earnings. (Fischer, 2023). Associated Press uses chatbot AP Newsbot to spot and publish breaking news and they also use AI to create sports stories and template game reviews. Ganguly (2022) argues that The New York Times has used AI to cover funds for election campaigns. No doubt that these advancements have helped the newsrooms to increase efficiency and productivity. It has also created new forms of audience



engagement and storytelling, the way journalists work, affecting the whole structure of the media industry. It also raises ethical concerns about how journalists uphold their standards and values while integrating AI into their work and how AI will affect the job displacement of journalists.

Nicholas Diakopoulos said that "AI helps Journalists to express and exercise their ethical and normative values through the code they implement and it can create new jobs for journalists rather than their removal" (Lewis, 2019). Andrea L. Guzman focuses on the provocations posed by AI which require bridging disciplinary and theoretical boundaries. Meredith Broussard said "advancement in technological tools can help in enhancing journalism practices like telling stories about the human condition" (Lewis, 2019).

Generative AI (gen AI) Chabot like ChatGPT helps in news production including translation of articles, content creation, generating new ideas, targeted newsletters, summarizing content, targeted newsletters, etc. Other AI technologies help in claim checking (NLP applications), video and audio production, fact-checking, analyzing recent trends, and data purifying to provide real-time news updates (Newman, 2023). Artificial intelligence can also help to customize data for news outlets and increase viewers engagement and reach to match content according to the target audience using personalization and recommendation systems. Echobox and SocialFlow schedule posts for digital media, Bersuggest and Google Discover identified keywords of trending stories and diverse newsrooms organized their own AI-generated tools (Beckett & Yaseen, 2023).

The main benefits that newsroom gets with the integration of AI include increased efficiency and enhanced productivity which in turn smooth workflows and allow journalists to engage in more composite and creative work or investigations, news production, proofreading, and basic copy editing, cutting costs; video production, speeding up data analysis; enabling newsrooms to engage with content in different languages, reaching a wide and targeted audience, and provide exclusive reader experiences.

Peña Fernández et al., 2023 said that in earlier eras, the prime responsibility of journalists was to transcribe information but after AI integration journalists can return to their core profession of thinking, analyzing and asking the right questions, truth and storytelling, and truth-seeking. AI practices have helped evolve daily journalism practices and take away some of their duties.

Charlie Beckett and Mira Yaseen (2023) place AI in the third wave, the result of technological development, after transferring everything through internet and moving to smart phones, and content production for social media.

Diakopoulos (2019) argue that newsrooms will always face the dilemma of integrating new technologies and will stick to the core journalistic values and also ensure that these applications benefit individuals, society, and businesses.

According to Nic Newman (2023), AI will never be capable enough to create instant credible content and it be difficult to tell the difference between actual and bogus information, which in turn can result in news getting commercialized and audience trust will also be compromise.

The AI algorithms on social media sites are affecting every step of news gathering, production, and news dissemination. These algorithms sometimes act as caretakers of information flow, shaping the public discourse, and potentially impacting the diversity



and inclusivity of news consumption. It serves special interests, repetition, reproduction, and duplication of the content (Erzikova, 2018; van Dalen, 2023).

According to Nicholas Diakopoulos (2019), AI will help in eliminating information spaces and then collecting its data by asking real people relevant questions to receive meaningful answers to fill in the identified gaps. He also believes that AI is already covering interviewing and reporting which will increase the news production speed and elevated worth publications. He also sees algorithmic media synthesis as a threat to produce bogus images, videos, voices, and text. It requires a considerable investment in multimedia forensics which will help in verification and authenticity of content, particularly images and videos.

According to Evens (2018), In the last decade due to technological advancements, many things have changed in Journalism which has raised concerns for scholars to focus on the viability of obtainable revenue streams for media organizations amidst the explosion of digital stages which have reasons of disruptions such as raised market fragmentation and shifting audience priorities.

Scholars working on the sustainability of existing newsroom business models found that AI can provide solutions to challenges such as reduced incomes and profits. Marconi (2020) notes that "producing content in mass amounts could cost next to zero once the appropriate technology is up and running".

Another challenge is the unpredictable nature of the impact of the technology. Pavlik (2001) claimed that "there is no guarantee that simply introducing new technology will enhance newsroom performance and news content". AI continues to have an massive impact through its use by numerous media organizations in different parts of the world to collect, distribute, and publish news content (De Sibandze, 2019). To this end, AI has been deployed to write news articles and opinion pieces, fact-check, read newscasts, and reduce budget in news operations.

Obonyo (2020) observed that computerization can decrease costs in the newsroom as a robot will not need medical insurance and overtime remunerations. Further, he describes that robots "will not join labor unions, will not argue back, and will be as good as the instructions they get and their built-in capacity".

AI has been used in the media field in several countries of the world to help in election coverage, writing news stories (Guardian, 2020), presenting broadcast news (Baraniuk, 2018), and identifying which stories attract a bigger audience on different platform, among other uses. In other countries of the world where AI has been used, the technology has presented its own set of distinctive challenges and opportunities.

BBC integrated AI to create an interface that automated coverage of the 2016 European Union (EU) referendum, the 2016 U.S. presidential election, and the United Kingdom's (UK) 2017 general election through the broadcaster's news website and digital media channels such as Facebook Messenger, Twitter and Telegram (Rachel, 2017).

AI can analyze huge quantity of data also it has latest equipments and tools which has made it a top priority for most enterprises, in recent years (Davenport & Ronanki, 2018). In the last four years, AI-integrated businesses have increased up to 270%, according to a recent Gartner survey (Rowell-Jones & Howard, 2019).

Developed countries are integrating AI techniques in their newsrooms and preparing themselves to rely completely on Artificial Intelligence (Goni & Tabassum, 2020). AI can reduce the need for human involvement by automating the tasks performed by machines and robots (Huang & Rust, 2020). No doubt AI is becoming the core part of



Western media but still, many media organizations and journalists lack effective strategic planning and also lack of knowledge to effectively utilize AI-related technologies (Webb, 2017).

The main threat that these AI technologies pose is related to objectivity and independence. The future of news production is not in the hands of news organizations but in the hands of technology companies (Diakopolus et al, 2019). With increased AI use in newsrooms, ethical interest should be the main focus for every media organization because it will severely influence journalistic practices (Stray, 2021). For instance, the prompt-less ability of Chat GPT can create AI-generated content lacking any human participation, store, gather, and share large data sets has resulted in increased concern among journalists and writers regarding standards, data ownership, governance, security, quality, and privacy (Pavlik, 2023; Jarrah et al., 2023, Zandi et al., 2019).

The International Conference of Data Protection and Privacy Commissioners, issued the statement in October 2018 related to Ethics and Protection in AI, highlighting the significance of reducing and addressing illicit unfairness and inequity arising from data usage in AI. AI integration will lead to automated journalism which will raise ethical concerns, including data mistreatment, due to the absence of obvious norms and values, latent data protection, and privacy hazards for consumers, makers, and government (Wang & Siau, 2018). If organizations use correct, accurate, and unbiased data as a counter to automated journalism can be an ethical imperative (Monti et. al 2019). In the time of Global Village, data protection, quality, source, and accuracy are also crucial because they can result in harmful impacts of AI use.

2.1 Theoretical Framework

Theory of disruptive innovation was introduced in 1995 by Clayton Christensen in the Harvard Business Review. This theory explains that sometimes new businesses overtake the existing businesses by innovating new and low cost innovations (Christensens et al., 2015). New business improve their product and services and disruption occur when consumers start using the products and services sold by start-ups (Raynor, 2011). Some industries are left behind because their leaders are late adopters while young practitioners became early adopters of any paradigm shift causing a significant impact on their industries (Anderson and Tushman et al., 1991).

The theory of disruptive innovation is applicable in our research because it examines existing businesses in relation to emerging innovations or threats such as AI (King & Baatartogtokh, 2015). This study examines that to which extent Pakistani newsroom working model is disrupted by innovating AI in their work. But our research needs to look that which factors are playing a positive role in the adoption of AI and why some channels still lack in the adoption of new technologies. That is why we need to apply another theory i.e, Theory of Technology Acceptance Model (TAM).

Theory of Technology acceptance model was introduced by Davis in 1986. This theory examines that the acceptance of any new technology or system is dependent on the motivation of the leaders of any organization. He further notices that this motivation depends on three factors: system's perceived usefulness towards one's job or role, its perceived ease of use and the person's attitude towards using it (Davis et al., 1989).

Sometimes there are some external variables that influence the person's choice towards any new technology (Davis & Venkatesh, 1996). These external variables are the characteristics of a system, the user's training, the participation of the user in the system



design and the manner in which the implementation process is carried out. This research formed its basis on TAM, which outlines a system's perceived ease of use and its perceived usefulness as some of the challenges that could affect the adoption of AI in newsrooms. The theory has been found to be a useful framework in understanding, explaining, and predicting user acceptance in new technologies (Chen et al., 2011) and therefore form a foundation from which to understand the implementation of AI technologies in newsrooms in Pakistan.

3. Methodology

This study employs a qualitative research design using in-depth interviews as the primary data collection method. This approach is suitable because the impact of AI in newsrooms can best be understood through the insights of professionals actively working in the field.

For this purpose, we selected newsroom leaders, including the Director News, Controller News, IT Head, Creative Head, and Packaging Head. A total of 25 face-to-face interviews were conducted with professionals from five prestigious news organizations: Dunya News, Express News, Aik News, Suno News, GNN, and Samaa News.

4. Data Analysis

Respondent 1: The respondent said that there is no proper use of AI tools in the newsroom of channel where he is working. It was noted that there are no SOP's of AI use in the newsroom and they are following traditional guidelines regarding news making. It was also revealed that they have used three AI reporters for the coverage of US presidential Elections 2024. Respondent also believe that the use of AI tools will reduce workforce and will be beneficial as well in the future of broadcast journalism in Pakistan.

Respondent 2: The respondent said that they are following the previous working SOP's of broadcast journalism in the newsrooms. Respondent told that AI tools are using just as supporting role for content creation in the newsrooms as it is helpful but not fully trustful. We are not using any AI tools for the working in the newsrooms. Respondent said that the AI tools could be beneficial but not reliable for content creation and it must have some negative effects as well. Respondent also accepted that AI will reduce workforce in a long run because it could be developed in future and will change the newsroom working model.

Respondent 3: The respondent said that AI is very important but understandable as we need to check every viral video due to this reason; AI is not practically used in the broadcast journalism but will be integrated in future. Respondent also confirmed that AI is being used in a minor level and AI reporters have been used for the media transmission at the time of US Presidential elections 2024. Respondent also revealed that there no AI tool being used in the newsroom while ChatGPT is using at personal level by the journalists. Interviewee also belief that AI tools will be beneficial but will have some adverse effects on broadcast journalism as well. The respondent also supposed that workforce of newsroom will be changed instead of being reduced because AI has a bright future in the Pakistani journalism. Respondent suggested that AI tools should be used as a working model of newsrooms in the future of Pakistani mainstream media.

Respondent 4: The respondent said that there is no proper use of AI tools in the newsroom of TV news channel. It was noted that there are no SOP's of AI use in the



newsroom because we have found the hazard of transparency lack. It was also revealed that AI should not be used because of technical issues and difficulties. Respondent also believe that the use of AI tools will not reduce workforce and will be not beneficial as well in the future of broadcast media in Pakistan.

Respondent 5: He said that the use of AI is very important because it will reduce speed of work and we are performing on and off experimentation on its use in the newsrooms. He also told that they have used AI somehow during coverage of US Presidential elections. We are also using some AI tools like ChatGPT, Runway, Leonardo, 11 labs, Canva etc for the creation of news content. Interviewee also suggested that AI tools should be used because it will be beneficial for the workers but it will cause bug or error in the content. There is a fine future of AI use in the broadcast journalism of Pakistan because it could be used but will also reduce the workforce as well.

Respondent 6: He also told that there is no use of AI in newsrooms on organizational level. They only use ChatGPT and WhatsApp Meta for their personal use to get awareness about a specific topic. Respondent 5 has also got training related to the use of AI and is aware of the ethical use of AI in his professional work but his organization does not allow him the use of AI. He told that he used AI in recent US elections to extract some international data and use it as required. He told that AI lacks the recent news information, that's why it is not helpful for newsroom.

Respondent 7: While answering to questions said that there is no use of AI in IT of newsroom. It is all technical work and is only done by humans. If there is any code related work then AI is helpful for them otherwise they do their work on their own. He also replied our work is not something which can be done relying on AI. He said that in future AI will not effect much on the IT because there are the technicalities related to IT which a human brain can handle much better than AI.

Respondent 8: Replied that we use AI for enhancing the picture quality. We also use AI to get idea of the designs and graphics required for work but we create our own content. We do not rely on AI for our whole content production. We prefer using Adobe software for our designing, even Canva is not used in our content production. He said that if we receive bad quality pictures from reporters in large quantity then we use AI tools to increase efficiency in our work. In future, he said, that if their organization will allow them the use of AI then their work will be much efficient than it is now but it will also reduce human workforce in our department.

Respondent 9: He said that we can't rely on AI because it is unable to create news tickers and news stories. AI is based on algorithms and news production can not be relied on algorithms. In future if AI advances it might help in newsroom but for now we are not using AI in news collection, news production or news dissemination.

Respondent 10: He replied to a question that there are no SOP's for the usage of AI in our organization. AI use is considered unethical and it is not that advanced to make our newsrooms dependent on AI. Newsrooms are dependent on latest news and AI tools like ChatGPT is not updated on recent news happenings. ChatGPT is also not able to create human version of the content which is a basic requirement for newsrooms. In future if AI will be updated on these things then it might be integrated in our newsrooms otherwise it will never effect the news organizations.

Respondent 11: He said that we do not promote usage of AI in our organization. He said that AI will not effect newsrooms in next near 10 years. AI lacks the skills necessary for newsrooms. Reporters are the main source of news collection and it is



very difficult for AI to be a part of data collection. Sometimes the content that AI provides is fake and needs double checking. It consumes more time so it is better to do it ourselves other than relying on AI. AI is also unable to provide correct references which is also another core of newsroom.

Respondent 12: He talked that there are no SOP's of using AI in news organizations. To integrate AI in newsrooms sessions on understanding the capabilities and limitations of AI are required. The workers lacks the knowledge on how to properly prompt and utilize AI for specific tasks like fact-checking, generating story ideas, data analysis, and translating text, while maintaining journalistic ethics and accuracy. He said there are significant concerns that AI tools could potentially displace some human workers in newsrooms.

Respondent 13: He also went on denying the use of AI. He said the use of AI in newsrooms in future will likely lead to a shift in job roles and responsibilities, but it's uncertain whether it will significantly reduce the workforce. AI tools can significantly enhance efficiency in mainstream media by automating repetitive tasks and providing data-driven insights.

Respondent 14: He said that to integrate the use of AI our organization need to train their employees on the effective use of AI. Our leaders need to understand that newsrooms can work efficiently with the use of different AI tools. They also need training on AI then there might be a possibility to add the use of AI on organizational level, otherwise we will not see the use of AI in any near future. Our leaders need to understand that AI use should be carefully managed to avoid potential issues like misinformation, ethical concerns, and a lack of human oversight, ensuring that AI acts as a supportive tool for journalists rather than replacing their core functions of investigation and critical thinking.

Respondent 15: He responded that we use AI just for our personal use. We use AI to perform our low level tasks, main tasks are done by ourselves. If we use AI on the organizational level we are not appreciated by our seniors and then we have to do it again with out own input. Sometimes when we need to find the history of any news then AI help us in it, it is not useful for recent news updates. Even if we use AI for any background knowledge there are still some doubts and we need to recheck it before applying it to our work. AI just know the information that is provided to it but in our work there are ground level facts, where AI lacks to help us.

Respondent 16: He responded that we use AI for research purpose because there is a lot of pressure of work in newsroom so, AI help us in research to collect data regarding news and its background but for most recent event its not helpful as it needs to update information. Then we need to cross check information and use other sources before applying it to work.

Respondent 17: Respondent told that AI tools are using just as supporting role for report writing in the newsroom. Respondent said that the AI tools could be beneficial but not reliable for content creation. Respondent also accepted that AI will helpful in future and will reduce workforce in newsroom and will evolve the newsroom working model.

Respondent 18: He said that AI tools are there for human help and our channels need to understand that it created or develop to save time in workload situation for example Canva in editing there are templates present which are quite helpful in short time to work quickly and cover news story. For use of AI training program or seminars



required to use AI for beneficial on organizational level, otherwise we will not see the use of AI in any near future because training is compulsory to eliminate misinformation or disinformation.

Respondent 19: He said that we can't rely on AI because News is about the happening rather than previous data that machines has. But only for research purpose we can use it to make story for occurred event. Other then that AI is based on algorithms and news production can not be relied on algorithms.

Respondent 20: He replied to a question that there are no usage of AI in our organization. Newsrooms are dependent on latest news and AI tools like ChatGPT is not updated on recent news happenings. ChatGPT is also not as worthful as human to create content which is a basic requirement for newsrooms.

Respondent 21: He said that we are not using AI but for personal use, AI helpful in sports world day story planning by analyzing current trends, social media activity, and search engine data to predict the stories. By understanding what topics are gaining traction, newsrooms can make more informed decisions about which stories to prioritize, ensuring content aligns with public interest. But still its merely use for research and personal use not officially.

Respondent 22: He said that we are not using AI tools in newsroom because we believe that as human can think and work creatively but machine can not. Other than that in newsroom mostly cover current happening or stories which is not available on AI we rely our own resources. So, we don't think it is useful for us

Respondent 23: He said that in our organization we are not using AI as per as we know that relying on AI tools could lead to over-dependence, where newsrooms lose their ability to function effectively without these systems. Technological glitches, biases or breakdown in AI systems could cause significant disruptions. In other fields AI is using but in newsroom because it needs to update for current news and we can not rely or it.

Respondent 24: He answer that AI tools lack the ability to understand the emotional refinement and context that often underpin a compelling story. Human can detect underlying emotions, tones, and cultural context in human behavior or events that machine might miss. For instance, an AI might write a factual article about a tragic event but fail to capture the sensitivity and empathy needed in the tone and framing of the story.

Respondent 25: He said that AI tools work best with digital data, but they may not be as effective when journalists need to gather information from physical sources like archives, face-to-face interviews, or fieldwork. AI cannot conduct interviews, witness testimony, or engage in face-to-face investigations where intuition and empathy are key. So, it can not think and work as human create and insightful. Right now we are not using AI.

4.1 Interview Questions

- 1) Do you think that how the use of AI is important for working in newsrooms?
- 2) Has AI tools changed the working model of TV newsrooms?
- 3) Has the use of AI tools started in the TV newsroom of Pakistani broadcast media?
- 4) Do you think that the use of AI could be beneficial for content creation in Pakistani contemporary media?
- 5) Do you believe that the use of AI will cause some adverse effects on Pakistani mainstream media?



- 6) Do you consider that AI use will reduce the newsroom workforce?
- 7) What is the future perspective of AI tools usage in TV newsrooms?
- 8) What is your opinion about the use of AI in the mainstream media?

Theme	Sub-Theme	Respondent Data
Current Use of AI in Newsrooms	Limited or No Use of AI	Respondent 1: No proper use of AI tools; no SOPs for AI use. Respondent 4: No proper use of AI tools; hazards of transparency lack. Respondent 6: No use of AI on an organizational level.
	AI as a Supporting Tool	Respondent 2: AI tools used as a supporting role for content creation. Respondent 17: AI tools used as a supporting role for report writing. Respondent 18: AI tools used for templates in editing. Respondent 3: ChatGPT used at a personal level.
	Personal Use of AI	Respondent 6: ChatGPT and WhatsApp Meta used for personal awareness. Respondent 15: AI used for personal low-level tasks. Respondent 5: AI used for news content creation (ChatGPT, Runway, Leonardo, etc.). Respondent 8: AI used for enhancing picture quality and design ideas. Respondent 16: AI used for research purposes.
Challenges of AI Integration	AI for Specific Tasks	
	Lack of SOPs and Guidelines	Respondent 1: No SOPs for AI use. Respondent 10: No SOPs for AI usage; considered unethical. Respondent 12: No SOPs; sessions required to understand AI capabilities.
	Technical Limitations	Respondent 4: AI should not be used due to technical issues.



Future of AI in Newsrooms	Ethical Accuracy Concerns and	<p>Respondent 10: AI not updated on recent news happenings.</p> <p>Respondent 11: AI lacks skills necessary for newsrooms.</p> <p>Respondent 2: AI not fully trustworthy for content creation.</p> <p>Respondent 11: AI content sometimes fake and needs double-checking.</p> <p>Respondent 18: Training required to eliminate misinformation.</p>
	Lack of Human Emotion and Context	<p>Respondent 24: AI lacks emotional refinement and context.</p> <p>Respondent 25: AI cannot conduct face-to-face investigations or understand empathy.</p> <p>Respondent 1: AI will reduce workforce but be beneficial.</p>
	Potential Benefits	<p>Respondent 5: AI will reduce speed of work and be beneficial.</p> <p>Respondent 17: AI will evolve the newsroom working model.</p>
	Workforce Reduction	<p>Respondent 1: AI will reduce workforce.</p> <p>Respondent 2: AI will reduce workforce in the long run.</p> <p>Respondent 8: AI will reduce human workforce in the future.</p>
AI in Specific Contexts	Shift in Job Roles	<p>Respondent 13: AI will lead to a shift in job roles but may not significantly reduce workforce.</p> <p>Respondent 14: AI should act as a supportive tool, not replace core journalistic functions.</p>
	Need for Training and Awareness	<p>Respondent 12: Workers lack knowledge on how to utilize AI.</p> <p>Respondent 14: Leaders need training on AI.</p> <p>Respondent 18: Training programs required for effective AI use.</p>
	AI in Election Coverage	<p>Respondent 1: AI reporters used for US Presidential Elections 2024.</p> <p>Respondent 3: AI reporters used for US Presidential Elections 2024.</p> <p>Respondent 5: AI used during US Presidential Elections coverage.</p>
	AI in Research and Background Work	<p>Respondent 15: AI used for historical background knowledge.</p> <p>Respondent 16: AI used for research and data collection.</p>



		Respondent 21: AI used for sports story planning.
Perceptions of AI	AI as Unreliable	Respondent 2: AI not reliable for content creation. Respondent 9: AI cannot create news tickers or stories. Respondent 19: AI cannot replace human intuition in news production.
	AI as a Future Tool	Respondent 3: AI will be integrated in the future. Respondent 5: AI has a fine future in Pakistani journalism. Respondent 17: AI will be helpful in the future.
	AI as a Threat to Workforce	Respondent 4: AI will not reduce workforce or be beneficial. Respondent 11: AI will not affect newsrooms in the next 10 years. Respondent 23: Over-dependence on AI could disrupt newsrooms.

5. Results

The data analysis concludes that AI is not being utilized at an organizational level in newsrooms; rather, it is used only for personal tasks by individual journalists or newsroom personnel. Several factors contribute to this limited adoption of AI in news production.

One major reason is the lack of awareness and technical knowledge about AI tools. Many newsroom professionals do not fully understand how AI can enhance their workflows, automate repetitive tasks, or improve content generation. Additionally, there is a widespread fear that AI will replace human jobs, leading to resistance in adopting AI-driven technologies.

Another critical challenge is that AI lacks the ability to capture human emotions, tones, and cultural contexts, which are essential elements in news reporting. Journalism is deeply rooted in critical thinking, ethical considerations, and storytelling—aspects that AI struggles to replicate effectively. Many professionals fail to recognize that if AI is used strategically, it can complement human efforts rather than replace them, allowing newsrooms to adapt to modern technological advancements instead of being left behind. Moreover, AI tools currently known to Pakistani journalists are limited to mainstream models like ChatGPT, DeepSeek, and Gemini. However, there are numerous other AI-powered tools that can enhance newsroom efficiency, such as automated transcription services (Otter.ai, Descript), AI-driven fact-checking tools, real-time language translation software, and automated video editing platforms. The lack of awareness



about these tools limits their ability to leverage AI for reducing newsroom pressure, improving content accuracy, and enhancing productivity.

To bridge this gap, news organizations in Pakistan need proper AI training, workshops, and seminars to educate professionals on how AI can be effectively integrated into newsrooms. With the right knowledge, strategy, and implementation, AI can assist journalists in data analysis, news verification, audience engagement, and content personalization, ultimately helping newsrooms become more efficient without compromising journalistic integrity.

References

- Aljoshia Karim Schapals, & Porlezza, C. (2020). Assistance or resistance? Evaluating the intersection of automated journalism and journalistic role conceptions. *Media and Communication*, 8(3), 16–26. <https://doi.org/10.17645/mac.v8i3.3054>
- Anderson, J., & Smith, A. (2014). AI, robotics, and the future of jobs: Key findings. *Technology Review*, 16(4), 28–35.
- Baraniuk, C. (2018). China's Xinhua agency unveils AI news presenter - BBC News. Bbc. <https://www.bbc.com/news/technology-46136504>
- Beckett, C., & Yaseen, M. (2023). Generating Change A global survey of what news organisations are doing with AI. In LSE. Polis. The London School of Economics and Political Science. <https://www.journalismai.info/s/Generating-Change--The-Journalism-AI-report--English.pdf>
- Chen, S.-C., Shing-Han, L., & Chien-Yi, L. (2011). Recent related research in technology acceptance model: A literature review. *Australian Journal of Business and Management Research*, 1(9), 124–127.
- Davis, F. D., & Venkatesh, V. (1996). A critical assessment of potential measurement biases in the technology acceptance model: three experiments. *International Journal of Human-Computer Studies*, 45(1), 19–45.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982–1003. <https://doi.org/10.1287/mnsc.35.8.982>
- De Sibandze, E. G. (2019). Artificial Intelligence for Journalism and Media Students. *How African Economies Work*, 151.
- Diakopoulos, N. (2019). Automating the news: how algorithms are rewriting the media (pp. 240–253). Harvard University Press. https://web-p-ebSCOhost-com.ezproxy.vdu.lt:2443/ehost/ebookviewer/ebook/ZTAwMHh3dI9fMjA5ODc3Nl9fQU41?sid=e62b6cf8-285a-4bde-83df-68b20a92c9c4@redis&vid=0&format=EB&lpid=lp_240&rid=0
- Erzikova, E. (2018). Gatekeeping. *The International Encyclopedia of Strategic Communication*, 1–6. <https://doi.org/10.1002/9781119010722.iesc0080>
- Evens, T. (2018). Media economics and transformation in a digital Europe. In *Comparative media policy, regulation and governance in Europe: unpacking the policy cycle* (pp. 41–54). Intellect.
- Fischer, S. (2023, January). Newsrooms reckon with AI following CNET saga. *Axios Media Trends*. <https://www.axios.com/2023/01/24/chatgpt-media-automation-cnet-saga>
- Ganguly, M. (2022). The Future of Investigative Journalism in the Age of Automation, Open-Source Intelligence (OSINT) and Artificial Intelligence (Ai). <https://westminsterresearch.westminster.ac.uk/download/cde69f292fd3498a0efcf5313b32184d051b0b08adfaddcf39b0ca9fc5b4dee4/5406648/PHD4CONFERRMENT.pdf>
- Guardian. (2020). A robot wrote this entire article. Are you scared yet, human? | GPT-3 | The Guardian. <https://www.theguardian.com/commentisfree/2020/sep/08/robot-wrote-this-article-gpt-3>



- Holland, B. (2015, October 15). Operationalizing the Information Age, Knowledge Economy, 21st Century. Education Week. <https://www.edweek.org/leadership/opinion/operationalizing-the-information-age-knowledge-economy-21st-century/2015/10>
- Huang, M.-H. and Rust, R.T. (2020). A strategic framework for artificial intelligence in marketing. Journal of the Academy of Marketing Science, [online] 49(1), pp.30–50. Available at: <https://link.springer.com/article/10.1007/s11747-020-00749-9>.
- King, A. A., & Baartartogtokh, B. (2015). How useful is the theory of disruptive innovation? MIT Sloan Management Review, 57(1), 77.ebooks/detail.action?docID=7250812#
- Lewis, S. C. (Ed.). (2019). Invited Forum. Artificial Intelligence and Journalism. Journalism & Mass Communication Quarterly, 96(3), 673–695. <https://doi.org/10.1177/1077699019859901>
- Marconi, F. (2020). Newsmakers: Artificial intelligence and the future of journalism. Columbia University Press.
- Martin, N. (2019, February 8). Did A Robot Write This? How AI Is Impacting Journalism. Forbes. <https://www.forbes.com/sites/nicolemartin1/2019/02/08/did-a-robot-write-this-how-ai-is-impacting-journalism/?sh=61497f2b7795>
- Newman, N. (2023). Journalism, Media, and Technology Trends and Predictions 2023 (pp. 1–6, 35–41). Reuters Institute for the Study of Journalism. [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2023-01/Journalism media and technology trends and predictions 2023.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2023-01/Journalism%20media%20and%20technology%20trends%20and%20predictions%202023.pdf)
- Obonyo, L. (2020). How age of robots will change media landscape - People Daily. <https://www.pd.co.ke/opinion/how-age-of-robots-will-change-media-landscape-52502/>
- Pan, Y. (2016). Heading toward Artificial Intelligence 2.0. Engineering, 2(4), 409–413. <https://doi.org/10.1016/j.eng.2016.04.018>
- Pavlik, J. (2001). Journalism and new media. Columbia University Press.
- Peña-Fernández, S., Meso-Ayerdi, K., Larrondo-Ureta, A., & Díaz-Noci, J. (2023).
- Rachel, L. (2017). How We Turned a Bespoke Bot into ‘Business as Usual’ | by BBC News Labs | BBC News Labs | Medium. <https://medium.com/bbc-news-labs/how-we-tuned-a-bespoke-bot-into-business-as-usual-21946633759d>
- Raynor, M. E. (2011). Disruption theory as a predictor of innovation success/failure. Strategy & Leadership, 39(4), 27–30. <https://doi.org/10.1108/10878571111147378>
- Toffler, A. (1980). The third wave. Bantam Books. <https://ia800106.us.archive.org/11/items/AlvinTofflerTheThirdWavePdfTKRG/Alvin%20Toffler%20-%20The%20Third%20Wave%20-%20pdf%20%5BTKRG%5D.pdf>
- van Dalen, A. (2023). Algorithmic Gatekeeping for Professional Communicators (pp. 1–16, 33–34). Taylor & Francis. <https://ebookcentral.proquest.com/lib/vmulib>
- Without journalists, there is no journalism: the social dimension of generative artificial intelligence in the media. El Profesional de La Información. <https://doi.org/10.3145/epi.2023.mar.27>