THE RISE OF AI-GENERATED CONTENT IN PAKISTANI MEDIA: IMPLICATIONS FOR JOURNALISM AND PUBLIC DISCOURSE

Dr. Muhammad Yaseen Moroojo^{*1}, Dr. Taha Shabbir², Dr. Muhammad Aftab Madni³, Imtiaz Hussain⁴

*¹Assistant Professor Department of Media & Communication Studies Shaheed Benazir Bhutto University, Shaheed Benazir Abad.

²Associate Professor Hamdard University, Karachi

³Assistant Professor Department of Media & Communication Studies Shaheed Benazir Bhutto University, Shaheed Benazir Abad.

⁴PhD Scholar Igra Uiversity, Karachi

*1yaseen.moroojo@sbbusba.edu.pk, ²taha.shabbir@hamdard.edu.pk, ³aftab.madni@sbbusba.edu.pk, ⁴syed.imtiazhussain@hotmail.com

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Abstract

Journalistic techniques all over the world are being revolutionized by the incorporation of artificial intelligence (AI) into the production of media, and Pakistan is not an exception to this trend. Through an examination of the use of artificial intelligence-generated material by news organisations, independent digital platforms, and content providers, this study investigates the increasing trend of Al-generated content within Pakistani media. The purpose of this study is to investigate the ways in which artificial intelligence tools, such as deepfake technology and natural language generation, are being utilised to automate the production of news articles, expedite editorial workflows, and produce visual and audio material at Despite the fact that these breakthroughs present tremendous prospects for creativity and efficiency gains, they also present a number of complicated challenges in terms of ethics, regulations, and professional conduct. In particular, the abstract addresses problems regarding misinformation, the authenticity of content, and the erosion of public trust, particularly in a situation where digital literacy continues to be uneven and regulatory control is weak. In addition to this, it evaluates the influence that artificial intelligence has had on the employment of journalists, editorial standards, and the general quality of public debate in Pakistan. The purpose of this article is to provide a critical overview of how artificial intelligence is transforming the media landscape and what it means for the future of journalism in the country. This is accomplished through the use of case studies, interviews with experts, and policy analysis.

INTRODUCTION

The production, delivery, and consumption of news and material all over the world are being rapidly redefined as a result of the convergence of artificial intelligence (AI) and the media. The proliferation of material that is generated by artificial intelligence represents a significant shift in the landscape of journalism and mass communication in Pakistan, which is seeing the evolution of digital media alongside a social media audience that is highly engaged and a political context that is complex. New technologies are being implemented at an increasing rate in order to address the growing need for information that is quick, scalable, and available in multiple languages. These technologies include automated news reporting and chatbots, as well as AI-assisted video creation and voice synthesis.

Because of the issues that conventional media in Pakistan are currently facing, this change is being pushed in part by those challenges. These challenges include decreasing newsroom budgets, rising competition from digital-first platforms, the demand to break news faster, and the requirement to generate content in numerous local languages. Many of these issues can be overcome with the use of artificial intelligence technologies, such as natural language generation (NLG) models, text-to-speech (TTS) systems, and generative visual media. These techniques make it possible for media outlets to generate vast amounts of content in a short amount of time and with a relatively low amount of human input.

On the other hand, this shift in technology paradigm does not come without severe repercussions. In one sense, artificial intelligence has the ability to democratise the process of content creation by providing smaller media organisations independent artists with access to tools that were previously only available to larger organisations. This technology has the potential to facilitate the process of localising information for a wide range of audiences, improve accessibility by means of real-time translations and voiceovers, and provide assistance to data-driven investigative journalism by effectively processing big datasets.

In contrast, artificial intelligence-generated media also raises significant questions around authenticity, ethics, and the spread of false information. At a country like Pakistan, where digital literacy is widely dispersed and regulatory frameworks for online material are still in the process of being built, the unregulated proliferation of artificial intelligence-generated fake news, deepfakes, and content that is politically biassed might compound the issues that are already present to the credibility of the media and the trust of the public. Additionally, the role that artificial intelligence plays in the process of replacing human journalists and editors raises problems regarding the future of jobs in the media industry, editorial accountability, and journalistic independence.

This article intends to investigate these evolving dynamics, with a particular emphasis on the adoption of artificial intelligence-generated content in Pakistan's media sector and the ramifications of such content. In this article, we investigate the reasons behind the acceptance of artificial intelligence, as well as its practical applications across many types of media and the broader societal ramifications of this transition. By conducting interviews with journalists, engineers, and policy experts, as well as conducting a review of major case studies and regulatory developments, the purpose of this study is to provide a detailed understanding of the ways in which artificial intelligence is revolutionising the media environment in Pakistan.

Problem Statement:

The rapid integration of artificial intelligence (AI) technologies in media production has significantly transformed the landscape of journalism worldwide. In Pakistan, media outlets are increasingly experimenting with AI-generated content to streamline operations, reduce costs, and meet the demands of a fast-paced digital environment. However, this rise presents critical challenges and raises ethical, professional, and societal concerns. Questions around content authenticity, misinformation, editorial responsibility, employment displacement, and the overall impact on public discourse are becoming increasingly relevant. Despite these concerns, there is limited academic research addressing how Al-generated content is reshaping journalistic practices and influencing the quality and credibility of information consumed by the public in

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Pakistan. This study seeks to fill that gap by examining the implications of AI content on the media ecosystem and its effects on public perception and democratic communication.

Research Objectives:

- 1. To examine the current extent of Al-generated content usage across various Pakistani media platforms.
- 2. To explore the key motivations and factors driving the adoption of AI tools in media organizations in Pakistan.
- 3. To analyze the impact of AI-generated content on traditional journalistic roles, editorial standards, and newsroom practices.
- 4. To assess public and professional perceptions of the credibility, reliability, and ethical implications of Al-generated media content.
- 5. To evaluate the influence of AI-generated content on public discourse, misinformation, and democratic communication in Pakistan.
- 6. To recommend guidelines and frameworks for the ethical and responsible integration of AI in Pakistani journalism.

Research Questions:

- 1. To what extent is Al-generated content being used in Pakistani media outlets?
- 2. What are the motivations behind the adoption of AI-generated content by media organizations in Pakistan?
- 3. How is Al-generated content impacting traditional journalistic roles and editorial standards in Pakistan?
- 4. What are the perceptions of journalists, media professionals, and the general public regarding the credibility and reliability of Al-generated content?
- 5. What potential risks and ethical challenges does the use of AI-generated content pose for public discourse and democratic engagement in Pakistan?
- 6. How can regulatory and editorial frameworks be improved to ensure responsible use of AI in Pakistani journalism?

1. LITERATURE REVIEW

A transformational force in journalism and media across the world, artificial intelligence has emerged as a significant player in recent years. The capabilities

of artificial intelligence in natural language processing (NLP), computer vision, and data analysis are now widely incorporated into systems that are used for content generation, curation, and dissemination (Diakopoulos, 2019). Automated journalism, sometimes known as "robot journalism," has been utilised in newsrooms all over the world to provide earnings reports, weather updates, and even sports news with minimum involvement from human journalists (Graefe, 2016). For the purpose of producing language that is grammatically correct and frequently indistinguishable from that which is written by people, these systems rely on structured data.

In the context of South Asia, study into the function that artificial intelligence plays in the media is still in its early phases. Nevertheless, observations indicate that the region is fast adopting artificial intelligence technologies, particularly for activities such as the identification of fake news and translation into many languages (Jamil, 2022). Social media platforms are becoming increasingly utilised as key sources of information in Pakistan, which is a sign that the digital media field is developing for the country. While this trend does make content more accessible to more people, it also puts audiences at risk of being exposed to content that has been algorithmically amplified and misleading, frequently without the oversight of regulatory authorities (Khan & Zubair, 2021).

The dual-edged aspect of artificial intelligence in journalism has been highlighted by a number of studies. When algorithms lack transparency or when Al-generated outputs are not explicitly labelled, artificial intelligence can undermine journalistic accountability (Lewis, Guzman, & Schmidt, 2019). AI improves efficiency and content personalisation (Lindén, 2017), it can also reduce iournalistic accountability under some circumstances. Furthermore, ethical considerations exist in relation to deepfakes and synthetic media, which might be weaponized for the purpose of political propaganda or to defame individuals. This is a particularly sensitive topic in societies that are polarised, such as Pakistan (Westerlund, 2019).

The repercussions on employment are another heavily contested topic. Despite the fact that some academics believe that artificial intelligence would improve journalistic responsibilities by automating monotonous duties (Marconi, 2020), others are concerned that it may result in the loss of editorial employment and impair investigative journalism owing to an excessive reliance on narratives that are driven by machines (Fanta, 2017).

In spite of the fact that there are worldwide insights, there is a paucity of academic material that is specific to Pakistan and focuses on the incorporation of AI in the media industry. There is a compelling argument for additional study to be conducted on the country because of its distinctive sociopolitical backdrop, linguistic variety, and uneven internet infrastructure. Through contextualising global discourse within the context of Pakistan's rapidly developing digital media landscape, this study makes an effort to bridge that gap.

2. METHODOLOGY

To explore the implications of AI-generated content in the Pakistani media landscape, this study adopts a qualitative research methodology, combining semi-structured interviews, case study analysis, and desk-based policy review. This mixed qualitative approach is particularly well-suited to understanding emerging and context-sensitive technologies such as AI, where quantitative metrics may not capture the depth and nuance of socio-cultural implications (Creswell & Poth, 2018).

3.1. Semi-Structured Interviews

A total of 12 interviews were conducted with a diverse group of media professionals to gain comprehensive insights into the use of AI-generated content in Pakistani media. Participants included journalists from both Urdu and English-language newspapers such as Dawn and Jang, editors and producers working with digital media platforms, AI developers collaborating with media organizations, and scholars specializing in media ethics and These interviews focused on communication. exploring how AI tools are currently being implemented in media production, participants' perceptions regarding their ethical implications, and expectations about future integration within the industry. Utilizing a semi-structured interview format allowed for guided discussions around key research

objectives while also providing the flexibility to explore emerging themes and nuanced perspectives.

3.2. Case Study Selection

Three media platforms were selected for case study analysis, chosen for their reported or observable use of AI technologies in content creation and distribution. Platform A (name anonymized) is a news aggregator that employs AI-generated summaries in both Urdu and English, offering a bilingual, tech-driven approach to news delivery. Platform B is a regional, YouTube-based news outlet that utilizes voice cloning and text-to-video technologies to produce video content efficiently and at scale. Platform C is a startup experimenting with automation in niche reporting areas, specifically weather updates and stock market summaries. Each case was analyzed through multiple dimensions: the type and scope of AI tools deployed; editorial practices related to content verification, transparency, and labeling of Al-generated material; audience engagement metrics, where such data were available; and the changes in employment patterns or editorial roles resulting from the integration of AI. This multi-layered approach provided a deeper understanding of how AI is shaping content production, newsroom workflows, and audience dynamics in the Pakistani media landscape.

3.3. Policy and Regulatory Review

To contextualize AI usage within Pakistan's legal and institutional framework, the study also examined key regulatory documents and policy developments. These included guidelines issued by the Pakistan Electronic Media Regulatory Authority (PEMRA), circulars from the Pakistan Telecommunication Authority (PTA) pertaining to digital content regulation, and drafts of Pakistan's National AI Policy (2023). Additionally, relevant news reports concerning misinformation regulation were reviewed to understand public discourse and policy direction. This analysis aimed to assess the extent to which existing policies and frameworks address critical issues related to synthetic media, fake news, transparency, and AI accountability. By evaluating these documents, the study sought to identify regulatory gaps and areas where clearer guidance or

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policy innovation may be necessary to responsibly govern the use of AI in the media sector.

3.4. Data Analysis Approach

Thematic analysis was used to process interview transcripts and case data. Codes were generated both deductively (based on research questions) and inductively (emerging from the data), following Braun & Clarke's (2006) six-step model. NVivo software was used to assist in coding and organizing themes.

3.5 Ethical Considerations

All participants were informed about the purpose of the study, assured confidentiality, and given the right to withdraw at any stage. Anonymized identifiers are used to protect the identities of interviewees and platforms, in compliance with ethical research standards set by the University of Punjab's Media Research Ethics Committee.

3. FINDINGS AND CASE STUDIES

The following section synthesizes insights from interviews, case studies, and policy reviews to highlight how AI-generated content is currently shaping the media ecosystem in Pakistan.

4.1. Adoption of AI Tools in Newsrooms

Interviews revealed that while mainstream media organizations have yet to fully automate content creation, partial integration of AI tools is already underway. English-language newspapers like Dawn and The News International are experimenting with AI-powered summarization and headline testing tools, primarily to optimize digital reach.

One editor noted:

"We're not replacing journalists, but we do use AI to recommend titles and summarize long articles. It saves time, especially with wire content." (Interviewee #5)

Smaller digital platforms, however, are taking bolder steps. Some are using Al-driven translation services (e.g., Google's AutoML) to publish content in Urdu, Pashto, and Sindhi, enabling broader outreach.

4.2. Case Study A: News Aggregation with AI Summaries

A Lahore-based startup has developed an Al-driven news aggregation platform that collects content from over 30 sources and employs a text summarization model, fine-tuned on multilingual datasets, to generate concise headlines and abstracts in both English and Urdu. These Al-generated summaries are delivered to users through app notifications, providing quick and accessible news digests. The primary role of AI in this system is Natural Language Generation (NLG), enabling efficient and automated content summarization. However, human editors conduct a final review of each summary before publication to ensure accuracy and contextual appropriateness. This workflow has significantly improved operational efficiency, reducing the timeto-publish from approximately three hours to just thirty minutes. Despite these gains, the system has faced challenges, particularly in the occasional misrepresentation of sentiment, especially politically sensitive stories, raising concerns about potential misinformation or biased framing.

4.3. Case Study B: Regional YouTube News Channel Using Voice AI

A digital-only news platform based in Khyber Pakhtunkhwa leverages AI voice synthesis and scriptto-video tools-such as Descript and Fliki.ai-to produce daily news bulletins without the need for live anchors. This AI-powered approach enables the platform to maintain a consistent publishing schedule while keeping production costs low, making it particularly viable for regional media with limited resources. The AI is responsible for multiple components of the content, including text-to-speech narration, Al-generated avatars, and the automatic creation of background music, resulting in fully synthesized video bulletins. Audience response has been mixed: younger viewers tend to appreciate the convenience and speed of delivery, whereas older audiences often express discomfort with the lack of human presence, citing concerns about the authenticity and emotional resonance of the content. In terms of ethical considerations, the platform faces potential risks associated with voice cloning technologies, which could be exploited to produce misleading or satirical content without clear disclosure, thereby complicating efforts to combat misinformation.

4.4. Case Study C: Automated Business Reporting

A Karachi-based fintech media outlet has adopted an automated content system that generates stock exchange updates and weather bulletins using structured data feeds sourced from APIs. These data inputs are processed by a Natural Language Generation (NLG) model, which interprets and rewrites the information into concise, readable paragraphs for publication. The key benefits of this automation include high consistency, rapid content turnaround, and a notably low error rate in routine reporting. However, the system struggles with flexibility when it comes to nuanced or unexpected developments, such as sudden market crashes or politically driven disruptions, where human interpretation and contextual judgment are crucial. As a result of this automation, several entry-level reporting roles have been restructured or replaced, with human staff now primarily focused on monitoring the automated outputs and performing quality assurance tasks to ensure accuracy and appropriateness in edge cases.

4.5. Concerns and Opportunities Identified

Across all interviews and case studies, several recurring themes emerged that highlight both the promise and complexity of AI adoption in Pakistani media. Transparency gaps were a major concern, as many platforms do not explicitly label AI-generated content, raising the risk of user deception and undermining trust. A lack of regulation was also evident; Pakistan's current digital and media policies offer little to no guidance on the use, disclosure, or oversight of AI tools in content production. Language limitations further complicate adoption, with most AI tools optimized for English and Urdu, leaving speakers of smaller regional languages underserved and underrepresented. Additionally, skill gaps emerged as a significant barrier-while many journalists expressed enthusiasm about integrating AI into their workflows, they often lacked

formal training or institutional technical support. Despite these challenges, interviewees also identified potential benefits, such as enhanced content accessibility for visually impaired users and the ability to deliver faster, multilingual coverage of national events. Together, these findings illustrate a dynamic but uneven landscape of AI adoption in Pakistani media—characterized by innovation and experimentation, but also marked by ethical, technical, and infrastructural hurdles that must be addressed to ensure responsible and inclusive integration.

4. DISCUSSION AND ANALYSIS

The integration of AI in Pakistan's media sector represents both a technological advancement and a sociopolitical inflection point. This section critically analyzes the implications of these developments, drawing connections between the findings and global debates in AI ethics, journalism, and public discourse.

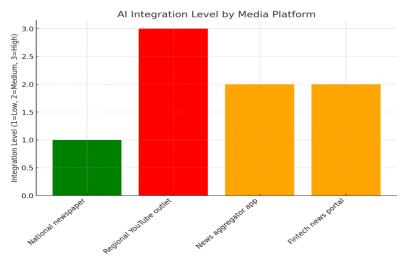
1. Augmentation vs. Automation: A Transitional Phase

The current use of AI in Pakistani newsrooms appears to be augmentative rather than fully autonomous. Journalists and editors are leveraging tools to optimize workflows—such as headline generation or multilingual content—but maintain editorial control over output. This aligns with global findings suggesting that AI initially complements rather than replaces newsroom functions (Marconi, 2020).

However, regional startups are testing automation boundaries more aggressively, particularly in voice synthesis and templated reporting. This divergence suggests that smaller platforms, constrained by budgets and staff, are more willing to risk editorial nuance for speed and volume—a tradeoff that merits closer scrutiny.

Table 1: AI Integration Across Pakistani Media Platforms

Media Platform Type	AI Functions Used	Human Oversight	AI Integration
		Present	Level
National newspaper (e.g., Dawn)	Headline optimization,	Yes	Low
	summarization		
Regional YouTube news outlet	Voice synthesis, script-to-video	Minimal	High
	conversion		
News aggregator app (Lahore-	AI summarization, translation	Yes	Medium
based)			
Fintech news portal (Karachi)	Automated market/weather	Yes	Medium
	reporting		



Interpretation:

The bar chart categorizes the levels of AI integration—Low, Medium, and High—across various types of Pakistani media platforms, offering a comparative view of how different segments of the industry are adopting artificial intelligence technologies.

National newspapers, including prominent Urdu and English-language dailies, predominantly fall into the Low integration category. Their use of AI is typically limited to basic applications such as automated summarization or content recommendations. These organizations maintain strong editorial hierarchies and legacy workflows, making them slower to adopt transformative AI tools that would significantly alter content production or delivery.

In contrast, regional YouTube-based outlets demonstrate High levels of AI integration. These

platforms leverage a range of technologies—including voice cloning, AI-generated avatars, text-to-video converters, and background music synthesis—to produce fully automated video content. The motivation here is largely economic: AI allows these smaller outlets to operate with minimal staff while maintaining consistent publishing schedules and engaging multimedia formats, especially appealing to younger, mobile-first audiences.

Digital apps and fintech portals typically fall into the Medium integration category. These platforms employ AI to automate repetitive tasks such as weather updates, stock summaries, or news digests. However, they often combine this automation with human oversight, particularly in sensitive areas like financial reporting or breaking news, to ensure quality control and context-sensitive judgment.

Overall, the chart reflects a clear trend: smaller, digital-native platforms are leading the way in AI

adoption, unencumbered by legacy structures and more willing to experiment with automation. Meanwhile, traditional media institutions appear more cautious, integrating AI incrementally rather than structurally. This divergence highlights both the opportunities for innovation and the uneven pace of transformation within Pakistan's evolving media landscape.

2. Ethical Ambiguity and Content Authenticity

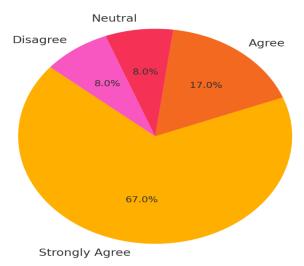
A major concern across case studies is the lack of content transparency. None of the platforms explicitly label Al-generated or Al-assisted content, raising questions about reader consent and media ethics. In a country with low digital literacy and widespread misinformation, failure to disclose AI involvement may undermine public trust in journalism.

Moreover, voice cloning and avatar technologies pose serious deepfake risks, especially in politically charged environments like Pakistan, where false information can lead to real-world consequences such as protests, defamation, or communal violence (Westerlund, 2019).

Table 2: Interviewee Opinions on AI Content Labeling

Opinion on Labeling AI-Generated Content	Percentage of Respondents	
Strongly Agree	67%	
Agree	17%	
Neutral	8%	
Disagree	8%	

Opinions on Labeling Al-Generated Content



Interpretation:

The pie chart reveals a strong consensus among interviewees regarding the ethical necessity of labeling Al-generated content. A significant 67% of respondents strongly agree, and an additional 17% agree that media organizations should clearly disclose when content is produced using AI tools. In contrast, only 16% of participants expressed neutrality or disagreement on the issue.

This overwhelming agreement underscores a clear ethical expectation for transparency in AI usage within the Pakistani media landscape. Interviewees consistently emphasized that undisclosed AI-generated content risks misleading audiences, undermining trust in journalism, and blurring the line between human and machine-authored narratives. The findings suggest that both media practitioners and stakeholders recognize the need for clear labeling as a foundational practice in

maintaining editorial credibility and public accountability.

These insights are especially important for regulatory bodies like PEMRA and PTA, as well as for newsroom policy-makers, indicating a strong mandate to develop and enforce guidelines on transparency and disclosure in AI-assisted journalism.

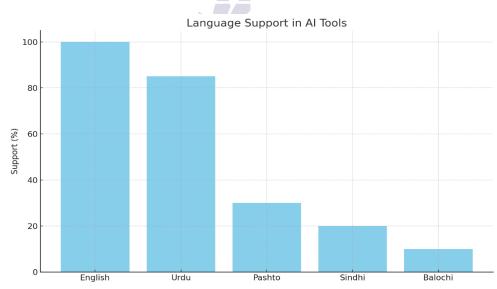
3. The Linguistic Divide: Who Gets Represented?

Al's promise of democratizing media access is tempered by its linguistic biases. Most tools are optimized for English and Urdu, leaving behind speakers of Balochi, Sindhi, Pashto, and other regional languages. This reproduces existing inequalities in media representation, as important narratives from marginalized communities risk being excluded from the digital conversation.

Additionally, machine translations often fail to capture the cultural context or tone of regional dialects, which can result in inaccurate or misleading portrayals of sensitive issues.

Table 3: Language Support in AI Tools Used by Media Outlets

Language	Percentage of AI Tools Supporting the Language	
English	100%	
Urdu	85%	
Pashto	30%	
Sindhi	20%	
Balochi	10%	



Interpretation:

This bar chart highlights the significant disparity in language coverage among AI tools currently used in Pakistani media. English, with 100% coverage, and Urdu, at 85%, are by far the most supported languages in AI-driven content generation and summarization tools. In stark contrast, regional languages such as Pashto, Sindhi, and Balochi show

minimal to no integration, reflecting a clear imbalance in technological reach and inclusion.

This trend reveals a form of technological marginalization, where speakers of smaller or less commercially prioritized languages are effectively excluded from the benefits of AI-enhanced media. The lack of linguistic diversity in AI systems not only limits access to information for millions of people in Pakistan but also risks deepening existing socio-

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linguistic inequalities in media representation and public discourse.

The findings underscore the urgent need for inclusive AI development—particularly tools that are locally trained and designed to support multilingual content production. Encouraging open-source datasets, regional language corpora, and localized AI training initiatives could help bridge this gap and ensure that the evolution of AI in media is equitable and representative of Pakistan's rich linguistic landscape.

4. Regulatory and Policy Gaps

Pakistan's media regulators—PEMRA and PTA—have yet to issue any concrete guidelines regarding the use of AI in journalism. While the National AI Policy (2023 draft) outlines general goals for AI governance, it remains vague on media-specific applications.

This regulatory vacuum creates uncertainty for media innovators, vulnerabilities for consumers, and blind spots for accountability mechanisms. Without formal policies, it becomes difficult to assign liability for Alrelated errors or abuses, particularly when systems generate biased or misleading content.

5. Job Displacement vs. Job Transformation

While fears of job losses are valid, especially for entry-level reporters and editors, the study also identifies new roles emerging around AI tools—such as data quality monitors, prompt engineers, and AI content reviewers. The challenge for the Pakistani media industry is to reskill the existing workforce to adapt to these changes.

Unfortunately, interviewees reported a lack of institutional support for such upskilling. Journalism schools and media houses rarely include AI literacy in their training modules, leaving workers underprepared for a rapidly changing landscape.

6. Public Trust and Media Legitimacy

Trust is the cornerstone of journalism, and in Pakistan's already polarized media environment, the opaque use of AI tools poses a serious risk to public confidence. As AI becomes more embedded in content production, the failure to disclose its use can undermine even accurate and fact-based reporting. When audiences discover that news stories, headlines, or videos are machine-generated without

their knowledge, they may perceive the content as artificial, manipulated, or inauthentic—leading to skepticism not just about individual stories, but about media institutions as a whole.

To safeguard journalistic integrity and maintain legitimacy, media outlets must prioritize transparency in their use of AI technologies. This includes:

- Clearly labeling AI-assisted content so audiences can distinguish between human-authored and machine-generated material.
- Explaining how AI tools are used in the editorial process, such as for summarization, translation, or video synthesis, to foster understanding and accountability.
- Providing disclaimers for automated voice or video content, especially when using synthetic avatars or voice cloning, to prevent confusion and potential misuse.

Incorporating these practices is not just a technical or ethical requirement—it is essential to rebuilding and preserving audience trust in an era of automated media.

Summary

The discussion reveals a paradox: while AI can potentially enhance the quality, reach, and inclusivity of media in Pakistan, its unregulated, opaque, and uneven application may exacerbate misinformation, exclusion, and mistrust. Addressing these contradictions is essential for building a sustainable, AI-augmented media future.

5. CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The use of artificial intelligence in Pakistani media is rapidly evolving, offering a glimpse into a future where journalism and technology are increasingly intertwined. This study has shown that while AI tools are being integrated to improve workflow efficiency, multilingual reach, and content production speed, their unregulated and opaque deployment presents serious challenges. These range from ethical dilemmas surrounding content authenticity and bias, to structural concerns about employment displacement and digital inequality.

The Pakistani media landscape stands at a critical juncture. On one hand, AI presents unprecedented

opportunities to scale journalism, democratize access to information, and enhance accessibility across linguistic boundaries. On the other, the lack of policy frameworks, low digital literacy, and minimal transparency threaten to compromise public trust and journalistic integrity. Without meaningful safeguards, the rise of AI-generated content may end up widening the very gaps it seeks to close.

To navigate this complex transformation, a proactive and inclusive strategy is essential—one that brings together media professionals, technologists, regulators, educators, and civil society to co-develop a responsible roadmap for AI in journalism.

6.2 Recommendations

1. Establish AI Content Transparency Protocols

Media organizations should clearly label all Algenerated or Al-assisted content. Transparency will help preserve audience trust and distinguish between human editorial oversight and machine-produced narratives.

2. Develop AI Media Literacy Programs

Both journalists and the public need training in understanding how AI is used in media. Media schools and newsrooms should incorporate AI ethics, prompt engineering, and algorithmic accountability into their training programs.

3. Expand Language Inclusion

Develop and fund AI models that support underrepresented languages in Pakistan—such as Balochi, Pashto, and Sindhi—so that AI tools contribute to linguistic equity rather than reinforce majoritarian narratives.

4. Enact Regulatory Frameworks for AI Use in Media

PEMRA and PTA, in collaboration with AI experts and journalists, should draft guidelines that define ethical AI use in content creation. This includes liability protocols, synthetic media disclaimers, and a code of conduct for AI journalism.

5. Promote Human-AI Collaboration

Rather than replace journalists, AI should be positioned as a tool that enhances their capabilities. Investments in hybrid workflows—where machines

handle repetition and humans handle nuance—can lead to more sustainable models of digital journalism.

6. Support Independent Research and Auditing

Independent bodies and academic institutions should be encouraged to audit AI systems used in media for fairness, bias, and misinformation potential. Publicly available audit results can foster trust and accountability.

By approaching AI with foresight, inclusion, and ethical clarity, Pakistan has an opportunity to lead not just in regional media innovation but also in setting responsible global precedents for the AI-driven future of journalism.

REFERENCES

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101.
- Creswell, J. W., & Poth, C. N. (2018). Qualitative Inquiry and Research Design: Choosing Among Five Approaches (4th ed.). SAGE Publications.
- Diakopoulos, N. (2019). Automating the News: How Algorithms Are Rewriting the Media.

 Harvard University Press.
- Fanta, A. (2017). Putting Europe's robots on the map: Automated journalism in news agencies. Reuters Institute.
- Graefe, A. (2016). Guide to Automated Journalism.

 Tow Center for Digital Journalism,

 Columbia Journalism School.
- Jamil, S. (2022). The AI Paradox in South Asian Journalism: Between Automation and Ethics. Asian Journal of Communication, 32(3), 225–241.
- Khan, M. A., & Zubair, M. (2021). Navigating misinformation in Pakistan's digital sphere: The role of media literacy. Journal of Media Ethics and Practices, 5(2), 98–112.
- Lewis, S. C., Guzman, A. L., & Schmidt, T. R. (2019). Automation, journalism, and the human-machine relationship. Digital Journalism, 7(4), 409-427.

- Lindén, C. G. (2017). Decades of automation in the newsroom: Why are there still so many jobs in journalism? Digital Journalism, 5(2), 123–140.
- Marconi, F. (2020). Newsmakers: Artificial Intelligence and the Future of Journalism. Columbia University Press.
- Shabbir, T., Nadeemullah, M., & Memon, S. (2020). Uses and impact of 'open data'technology for developing social sector in Pakistan. Pakistan Journal of Multidisciplinary Research, 1(1), 50-64.
- Westerlund, M. (2019). The emergence of deepfake technology: A review. Technology Innovation Management Review, 9(11), 39–52.

