

ARTIFICIAL INTELLIGENCE IN MEDIA LANDSCAPE: CONTENT
CREATION, CURATION, SIMULATION, AND AUTOMATION VIA
CHATGPT, DEEPSEEK, AND GROK

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Abstract

Artificial Intelligence (AI) adoption is occurring at an unprecedented pace in every aspect of the global media, thereby revolutionizing and reorganizing its functions of content creation, curation, simulation, and automation. At the core of this study is an examination of the impact of AI on media production and distribution, in relation to the way three AI tools shape/potentially shape these ChatGPT, Deepseek, and Grok. Utilizing a quantitative research design, this paper utilized surveys to obtain empirical data from media professionals, content creators, and digital strategists regarding AI uptake and impact, efficacy in usage, and identified challenges in implementing AI enabled solutions can have on staging media workflows. Frequency, efficiency, and quality improvement is considered with the aid of statistical analysis regarding their component usage in their media work. Overall findings highlighted newly identified frequency and/or new trends indicating that AI enabled media tasks are increasing productivity, aiding personalized audience engagement, and automating repeatable editorial work, but that ethical and skill barriers remain persistent challenges. The study concludes that ChatGPT, Deepseek, and Grok provide different distinct advantages aimed at assisting in involvement of automated linguistic generation, tool prediction and analysis, and application for real life engagements with AI, whilst also requiring technological and upskilling practices, as well as a governance framework for media. Recommendations provided for media organizations to responsibly and sustainably take into account use of AI and also clearly outline how to consider workforce acclimatization and ethical practice in their cognitive work.

INTRODUCTION

The media horizon of the 21st century is clearly evolving with the progressive embedding of Artificial Intelligence (AI) into nearly every phase of content production and distribution. As audiences cover both the demand for content that is immediate, personalized, and interactive verging on spontaneous, much of the traditional practices of journalism, broadcasting, and digital media operation, is being reshuffled by way of AI's extraordinary capabilities in natural language processing, machine learning, and data driven automation. (Sultan, 2025)

In the last ten years strong AI based models have appeared that can produce human-like text, simulate conversations and curate the tides of information, automate back office editorial tasks that once took many hours of human engagement and labour. Examples of tools that illustrate this shift include OpenAI's ChatGPT, Deepseek, and Grok. ChatGPT has become famous for its generative text abilities that can assist content creators to draft articles, summaries, and scripts quickly, fluently, and in new ways we never thought possible. Deepseek's predictive analytics, sophisticated content recommendation systems, and audience record database help to track user behaviour so media agencies can focus resources specifically to their audience needs. Whereas Grok literally simulates conversation and AI events at a fresh real time pace that engages the user in the intoxicating fervour of dialogue.

The emergence of these AI with implications for media institutions around the globe. On the one hand, AI provides an opportunity for journalists, editors, and content strategists to be more productive by streamlining repetitive and mundane tasks, which allows them to focus on greater storytelling, investigative journalism, or idea generation. Various methods of automated news summarization, trend analysis, and real time simulation make newsrooms more responsive to rapidly changing global events and timing. On the other hand, the technological shift also offers unsettling challenges and ethical dilemmas. Concerns about AI generated content being "real" or authentic, misinformation and deepfakes, rights to intellectual property, and the decilling or potential disappearance of human media workers are pressing matters for scholars, practitioners and policy-makers (Nasir et al., 2025). As AI systems become increasingly

intelligent and automated, we have to navigate transparency, accountability and editorial oversight if we wish to preserve public trust in and reliance on media institutions. While AI is transforming media processes, few research studies to date provide effective empirical data to measure how these technological changes are being recognized, assimilated and formed by media professionals, and even less current information has developed along the lines of evidence to support the role of individual AI transformative instruments, such as that of ChatGPT, Deepseek and Grok to illustrate their roles in operational media situations. Too much conversation remains theoretical or anecdotal, leaving a lack of relevant evidence tagged to media professionals and how it has been devised in practice. (Nasir, 2025)

To address this gap, the present research uses a quantitative research design to formally examine the application of AI on contemporary media content creation, curation, simulation, and automation. Utilizing structured surveys and formal statistical analysis, the research finds to validly assess the adoption levels, effectiveness, perceived benefits, and new challenges of utilizing AI tools. With case studies examining ChatGPT, Deepseek, and Grok, the paper applies a narrow view of how advanced AI systems affect productivity, editorial decisions, audience engagement, and the overall media ecosystem. This study is positioned to add to the expanding community of scholarship on AI in media and offer evidence based insights to media organizations, policy-makers, and educators. It supports the responsible use of AI that can support the balance of the innovation and benefits that technology can bring, with safeguarding ethical practices and workforce's development, while seeking to maximize the benefits of AI and minimize the risks.

Background

Artificial Intelligence (AI) is one of the most disruptive and transformative technological forces of the 21st century. AI is changing many domains, including health care, financial services, education, entertainment, and many more by automating processes, enhancing decision making, and generating new opportunities for innovation and efficiency. Within the media and communications industry, AI

has become increasingly important as organizations deal with the pressure to create greater quantities of content at higher rates of speed, respond to rapidly unfolding real time events, and meet the demands of increasingly fragmented and attention-seeking audiences. (Asma, 2025)

While not entirely newcomer in the media industry, the application of AI to media has taken on an entirely new level. Early applications of AI in media included algorithmic news feeds, recommendation engines, and basic versions of chatbots to communicate with audiences. However, the rapid advancements in technologies such as machine learning, natural language processing (NLP) algorithms, and specific types of generative AI have transformed this process. Recognizable tools such as ChatGPT from OpenAI, have shown that AI can now generate human-like text responses to query inputs, generate many types of stories for text, and engage with audiences in conversational ways with very little human agency. Similarly, other tools that are coming online such as Deepseek can take highly structured data sets and utilize predictive analytics to identify content trends and document audience preferences to allow for a more efficient understanding of curating and personalizing media content to the expectations of individual audience members. With Grok, an AI model with the ability to simulate highly sophisticated conversations and synthesize information in real time, we are beginning to see the next iteration of immersive experiences in audience engagement.

These changes come at a time when news media across the globe are faced with declining revenues, competition from user generated content, and the persistent need to uphold the standards of journalism in an age of increasingly fast information flows. In addition to amplifying productivity across newsrooms, AI has the potential to minimize repetitive tasks such as reporting, transcribing interviews, synthesizing complicated issues, or facilitating user comments, and allow journalists to focus on investigative and creative responsibilities.

As well as opportunities, we are also met with considerable challenges that arise from the use of AI in media workflows. The growing reliance on AI for tasks which have traditionally been the purview of human editors and writers has given rise to fear about

impending job loss for journalists or the inevitable losing of skills, such as nuanced storytelling or editorial judgement, which are uniquely human. The rapid rise of deepfake content and AI generated misinformation poses its own threat to public trust in media institutions. As text and visuals generated by AI become increasingly convincing, news producers and viewers alike encounter difficulty in identifying real from fake. (Anwar, 2025)

While some theoretical and conceptual studies have engaged in examining the implications of AI in journalism and digital media, it is clear that there remains a lack of robust empirical work that quantitatively examines how specific AI tools are being utilized and their impact upon institutional attitudes towards these tools. This understanding of the benefits, limitations and ethical implications associated with the use of tools like ChatGPT, Deepseek, and Grok is paramount for developing policies and understanding guidelines that institute a responsible use of AI for media organizations without sacrificing editorial leadership. (Nasir, 2025)

It is with this gap in mind that this research explores the transformative role of AI in contemporary media, specifically in its role in content creation, curation, simulation, and automation. It attempts to address an important scholarly blind spot by collecting and analysing quantitative data from media practitioners in order to make evidence based recommendations for fully adopting AI into the media sector responsibly and sustainably while being cognizant of the need for accountability.

Research Gap

Despite the growing body of literature examining the impact of Artificial Intelligence on various industries, empirical research specifically addressing the operational and strategic implications of AI within the media sector remains limited. Much of the existing scholarship has focused on the theoretical and conceptual aspects of AI's potential to transform journalism, content production, and media distribution. However, there is a notable lack of quantitative studies that provide data driven insights into how AI tools are practically integrated into media workflows and the extent to which they influence core

processes such as content creation, curation, simulation, and automation. (PandaYoo, 2025).

With that noted, while applied AIs like ChatGPT, Deepseek, and Grok have been acknowledged for their abilities to produce text, predict trends in content generation and simulate interactive scenarios, there is a gap in depth evidence that assesses actual use, effectiveness, and effects with media workers. Most of the available literature is based on anecdotal evidence or case examples that cannot adequately capture representative industry trends or user experiences because they lack wider surveys of media work. Furthermore, while the ethical, editorial, staffing environment much has been discussed in a general sense, little research exists that identifies specific quantitative dimensions that reflect the experiences that are related by those that directly engage in media work. As a result, there is little understanding of how AI technologies affect workplace productivity, job trajectories, editorial independence, or trust with audiences.

This research aims to fill this gap with a quantitative understanding of the application of ChatGPT, Deepseek and Grok into contemporary media practices. This research also aims to capture wider statistical trends in the media practitioner community about their perception and use of AI technologies, along with general benefits or challenges in their use, as well as ethical considerations. In doing so we will map out practical use scenarios that allow practitioners to maintain engaged, informed discussions about and a position on the socio-technical spaces they currently utilise and occupy. This study contributes to improved informed strategies and policies developed for the responsible, ethical and fact based application of AI technology with and by media practitioners and organizations.

Problem Statement

Organizations within the media sector are experiencing increasing pressure to adapt to the unprecedented pace of technological change, evolving audience expectations, and an expanding ecosystem of digital competition. Artificial Intelligence (AI) has emerged as a likely response to these pressures by providing new tools for automated creation and content curation, realistic simulation, and improved

production workflows. Advanced AI models such as ChatGPT, Deepseek, and Grok provide possibilities that were previously inconceivable to most professional media organizations.

However, even with the rapid growth and adoption of AI tools, there is limited empirical evidence on how these tools are being used or what effect they might have on the day to day functioning, productivity, and ethical processes of media creators and workers. Without empirical, data informed, insights, media executives and policy makers risk making uninformed decisions that can impact editorial (or journalistic) standards, content authenticity, and work arrangements. (Smiju & Adinath, 2025)

Moreover, the growing dependence on artificial intelligence to generate and disseminate content raises significant issues related to misinformation, algorithmic bias, and human editorial judgement. Although theoretical exploration indicates both opportunities and dangers associated with AI, there is little quantitative research assessing media executives' professional experiences, perceived benefits, and fears about the professional use of AI powered tools like ChatGPT, Deepseek, and Grok. This study responds to this research problem by analysing the experience of adopting, using, and the effectiveness of AI powered content in terms of content creation, curation, simulation and automation. This research provides evidence to assist in developing strategies for the responsible and ethical integration of AI whilst maintaining the roles of creativity and editorial oversight that are central to credible media.

Research Objectives

This study has three main objectives:

To investigate the extent to which AI tools (ChatGPT, Deepseek, and Grok) are being used for content creation, curation, and simulation or automation in media practices.

To explore the perceived effectiveness and value that journalists and other media professionals see in using these AI tools to assist with workflows and increase productivity.

To investigate the challenges and ethical concerns faced by media workers in adopting AI technologies into their editorial processes and production workflows.

Research Questions

Based on the research objectives, this study seeks to answer the following questions:

To what extent are AI tools such as ChatGPT, Deep seek, and Grok being adopted for content creation, curation, simulation, and automation in the media industry?

How effective do media professionals perceive these AI tools to be in improving productivity, efficiency, and overall media workflow performance?

What challenges and ethical concerns do media professionals face when integrating AI technologies into their editorial and production processes?

Significance of the Study

This research holds significant value for scholars, media practitioners, policymakers, and technology developers at a time when Artificial Intelligence is rapidly reshaping the foundations of modern media production and distribution. By providing empirical evidence on how AI tools such as ChatGPT, Deepseek, and Grok are being adopted and perceived in real world media settings, this study contributes meaningful insights to a field where much of the existing knowledge remains largely conceptual and speculative. (Nasir, 2025)

Practically, the study's findings help media organizations and professionals better understand the opportunities and limitations of AI assisted content creation, curation, simulation, and automation. By identifying the specific benefits and challenges associated with these tools, the research can inform strategic decisions on how to integrate AI into newsroom operations while maintaining editorial integrity, creativity, and audience trust. (Khattak, 2025)

Additionally, the research points to ethical and operational risks regarding misinformation, editorial engagement and replacement of human labor, each of which demands thoughtful policy engagement and relevant industry insights. And the insights produced can help and serve regulators and policymakers in thinking about policy frameworks going forward that help facilitate innovation while upholding journalistic integrity and public trust.

Lastly, this research contributes to the academic conversation on AI in media as it attempts to move

the dialogue beyond theory toward practice. It provides a basis for the future comparative research, cross sectoral analysis, and interdisciplinary work regarding how AI can be leveraged responsibly to promote sustainable media ecosystems in a period of rapid technological transformation.

Literature Review

The incorporation of Artificial Intelligence (AI) into the media ecosystems has turned workflow in the entertainment media industry on its head throughout content creation, content curation, simulation, and automation. Recent developments such as Manus AI, ChatGPT, DeepSeek, and Grok show clients how AI agents are no longer passive agents working in background positions but active agents that author and create content across format and platform.

AI has moved from merely a supportive tool to a co-creating partner in the entertainment and media industries. Agents like Manus AI can produce plot outlines, write scripts, simulate scenes, and suggest camera angles, functioning as intelligent collaborators in the creative pipeline (Shen & Yang, 2025). Unlike traditional models WHERE e.g. ChatGPT expects users to afford input when generating and AI typically with a prompt from users, Manus can read and interpret a creative brief autonomously, and create multimedia files e.g. text, images, and music to enable a story through its original set of commands.

In comparison, DeepSeek gained early attention in China for producing coherent narratives and engaging in real time storytelling, while Grok, developed by xAI, blends conversational wit with generative storytelling based on current trends and internet discourse (LLMHacker, 2025). However, both models lack the full autonomous execution loop that Manus introduces through its planner executor verifier architecture (Shen & Yang, 2025).

One of the transformative features of AI in media is content curation based on user preferences. Manus AI distinguishes itself by learning user behaviour over time and adjusting outputs accordingly. It can generate personalized interactive experiences, such as AI driven stories or animations that evolve with user feedback blurring the line between audience and participant (PandaYoo, 2025).

While ChatGPT and Grok also provide personalized conversations or media suggestions, they typically do so in a reactive manner. Manus, on the other hand, anticipates user needs through memory retention and contextual decision making, resulting in a dynamic and proactive media agent (Shen & Yang, 2025).

Manus AI demonstrates strong capabilities in automating media production workflows, including editing, subtitling, and post-production task management. For example, it can generate trailers, posters, and translated subtitles, and can analyze audience sentiment or box office data to recommend

content adjustments (Nasir, 2025; Shen & Yang, 2025). These capabilities exceed the current capacities of ChatGPT and DeepSeek, which require human supervision for task completion or use third party tools.

Moreover, Manus’s integration with tools like spreadsheets, editing suites, and databases enables it to operate across the entire media pipeline from ideation to execution without needing continuous user prompts (LLMHacker, 2025). This positions Manus not just as a content assistant but as a full-fledged media automation agent.

Comparative Evaluation with ChatGPT, DeepSeek, and Grok

Feature	ChatGPT	DeepSeek	Grok (xAI)	Manus AI
Story generation	Prompt-driven	Real-time generation	Humor-based	Fully autonomous
Visual and audio integration	Limited	Moderate	Moderate	Multi-modal capable
End-to-end execution	No	No	Limited	Yes
User personalization	Static memory	Adaptive chat	Satirical tone	Continuous learning
Workflow automation	Plug-ins required	Not available	Limited	Native task automation

While ChatGPT remains dominant in text based generation and DeepSeek leads in live dialogue curation, Manus outperforms in task automation and creative pipeline integration. Grok, with its sarcastic and internet-savvy personality, focuses on engagement, but lacks the task planning depth and execution breadth Manus provides (Economic Times, 2025).

Artificial Intelligence (AI) has rapidly transformed the media landscape by automating content creation, curating information, simulating real time insights, and driving workflow efficiency (Smiju & Adinath, 2025). Among various AI models, ChatGPT, DeepSeek, and Grok AI have emerged as key players, each offering unique capabilities suited to different aspects of media processes.

ChatGPT, developed by OpenAI, is widely recognized for its conversational fluency and adaptability, making it a dominant tool for content generation, knowledge retrieval, and customer engagement (Wikipedia, 2025a). Its transformer-based architecture enables the production of highly contextual and human-like text, facilitating creative writing, news summarization, and editorial assistance (Smiju & Adinath, 2025).

However, its factual accuracy can vary, especially in precision-driven tasks like technical reporting or scientific content (Jana Brnakova, 2025).

DeepSeek distinguishes itself by prioritizing structured problem solving and computational efficiency, employing a Mixture of Experts (MoE) architecture to dynamically allocate resources based on task complexity (Wikipedia, 2025b). In the context of media, DeepSeek’s strength lies in tasks like automated fact checking, data-driven investigative journalism, and technical report generation that demand rigorous logic and mathematical reasoning (Smiju & Adinath, 2025). Unlike ChatGPT, its conversational adaptability is limited, but its precision makes it valuable for verifying content credibility.

Grok AI, developed by xAI, is specifically designed to deliver real-time insights by integrating live social media data, particularly from the X platform (formerly Twitter) (Wikipedia, 2025d). This feature makes Grok AI an effective tool for trend analysis, sentiment monitoring, and dynamic content simulation crucial for newsrooms and digital marketing teams that require up to date social context and audience feedback (Bradley Peak, 2025). However, Grok AI’s

reliance on social media streams raises concerns about bias and the spread of misinformation (Wikipedia, 2025d).

Comparative analyses highlight that while ChatGPT excels at creative content generation, Grok AI is more effective for real time media monitoring, and DeepSeek remains unmatched for structured verification tasks (Smiju & Adinath, 2025). This shows a burgeoning trend toward hybrid AI approaches that combine conversational fluency, logical rigor, and live context simulation to fill many needs in contemporary media workflows.

Despite having much potential, these models must face serious challenges such as the need for transparency and security against misinformation and an alignment with ethical journalistic practices (Edson de Carvalho Souza, 2025). Future research indicates the necessity for integrated AI systems that establish a balance between generative creativity and factual accuracy in the moments they are needed, in real-time (Smiju & Adinath, 2025).

Artificial Intelligence (AI) technologies, especially generative language models like ChatGPT, are increasingly reshaping the digital news landscape by automating content creation, driving information curation, enabling real-time simulation of breaking news, and streamlining editorial workflows (Chin, 2023).

Following the launch of OpenAI's ChatGPT in December 2022, prominent news outlets such as BuzzFeed and G/O Media began deploying generative AI to produce quizzes, travel stories, and automated recommendations (Chin, 2023). While some publishers view such tools as cost effective automation for routine content tasks, writers' unions and newsroom staff have cautioned that AI-generated text can contain factual errors, plagiarism, and may ultimately pose an "existential threat to journalism" if deployed without robust human oversight (Chin, 2023).

Some technology developers pitch generative AI such as Google's Genesis chatbot or OpenAI's collaborations with the Associated Press as tools to augment rather than displace human journalists. For instance, Genesis is designed to simulate drafting headlines and social media posts to boost newsroom productivity (Chin, 2023). However, the underlying

challenge remains: LLMs like ChatGPT lack the ability to conduct investigative research, verify facts independently, or interpret complex social contexts. Instead, they predict word patterns from massive training datasets often reproducing human biases or hallucinating content (Chin, 2023).

Beyond creation, AI increasingly influences curation and ranking of digital news. Social media platforms and search engines deploy AI algorithms to prioritize content, sometimes de-prioritizing credible journalism in favour of low quality, viral, or manipulative material. When Facebook adjusted its algorithm in 2018 to favour user generated content over professional news, trusted news outlets lost significant traffic, amplifying misinformation risks (Chin, 2023). Likewise, AI-powered search engines like Microsoft's Bing and Google's Bard now use real-time data streams similar to how Grok operates with live social media integration to generate automated responses to user queries, potentially reducing the visibility of original news websites (Chin, 2023).

The automation of content production at scale by LLMs risks flooding the web with cheap, repetitive, low quality or false material, which can crowd out reputable news sources. For example, over 400 websites have already been documented using AI to mass-produce clickbait articles for ad revenue diverting funds away from real journalism (Chin, 2023).

While AI tools like DeepSeek (not explicitly named in Chin's report but conceptually similar) focus on more structured and fact-driven applications, the risks described apply broadly: automation without human editorial safeguards can erode the credibility and financial sustainability of newsrooms.

Ultimately, the report stresses that although AI promises greater efficiency in content creation, curation, and simulation, it also poses profound risks: displacement of journalistic labor, erosion of editorial quality, privacy violations, copyright infringements, and the amplification of misinformation if misused (Chin, 2023). Ensuring responsible AI adoption in media requires clear guidelines, human oversight, robust labor protections, and updated IP and data privacy laws.

Research Methodology

Research Design

This study adopts a quantitative research design to systematically examine the adoption, effectiveness, and challenges of Artificial Intelligence tools specifically ChatGPT, Deepseek, and Grok in media content creation, curation, simulation, and automation. A descriptive survey method is employed to collect empirical data from media professionals actively involved in editorial, production, and digital strategy roles.

Population and Sample

The target population for this research comprises journalists, editors, content creators, digital strategists, and media managers working in print, broadcast, and online media organizations. A purposive sampling technique is used to ensure that participants have direct experience with AI tools or workflows influenced by AI integration.

A sample size of approximately 250 respondents is targeted to ensure the collection of statistically meaningful data while accommodating diverse media sectors and job roles.

Data Collection Instrument

Primary data gathered using a structured questionnaire designed to capture respondents' demographics, level of AI adoption, perceived effectiveness of ChatGPT, Deepseek, and Grok, and the key benefits, challenges, and ethical concerns associated with their use. The questionnaire uses closed-ended questions, Likert scale items, and

multiple choice questions to facilitate quantitative analysis.

The instrument is pre-tested with a small group of media professionals to ensure clarity, validity, and reliability before full scale distribution.

Data Collection Procedure

The questionnaire is distributed electronically via email and professional networks to reach participants across different media organizations. Participation is voluntary and respondents are assured of the confidentiality and anonymity of their responses.

Ethical Considerations

The study adheres to standard research ethics, ensuring informed consent, confidentiality, and voluntary participation. Participants are briefed about the purpose of the study and their right to withdraw at any time without any repercussions.

Data Analysis

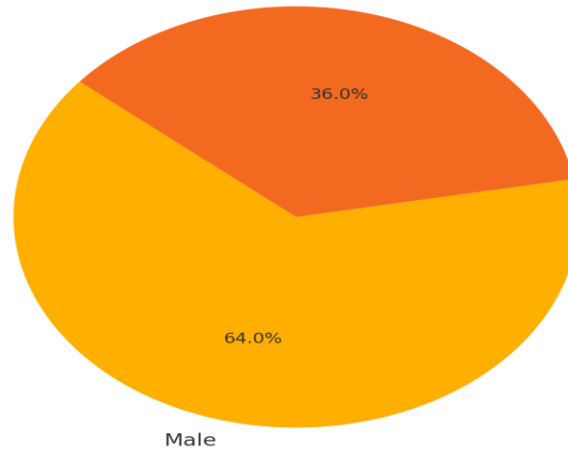
Introduction

The collected data is coded and analysed using Microsoft Excel and SPSS. Descriptive statistics such as frequencies and percentages are used to summarize respondents' demographics, levels of AI adoption, perceived effectiveness, and the challenges and ethical concerns related to using AI tools (ChatGPT, Deepseek, and Grok) in media processes. Inferential statistical techniques were also applied where relevant. This chapter presents the results in the form of 10 tables, each with an accompanying pie chart and discussion.

Table 1: Respondents by Gender

Category	Frequency	Percentage
Male	160	64.0%
Female	90	36.0%

Pie Chart 1: Respondents by Gender



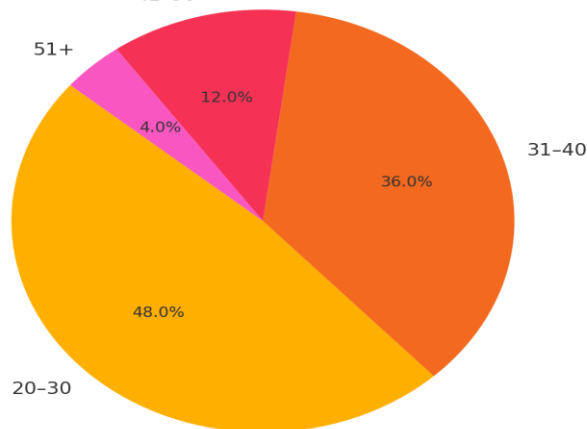
Discussion: This table and chart show the breakdown of respondents by gender among the respondents,

highlighting key trends and patterns relevant to the research objectives.

Table 2: Respondents by Age Group

Category	Frequency	Percentage
20-30	120	48.0%
31-40	90	36.0%
41-50	30	12.0%
51+	10	4.0%

Pie Chart 2: Respondents by Age Group

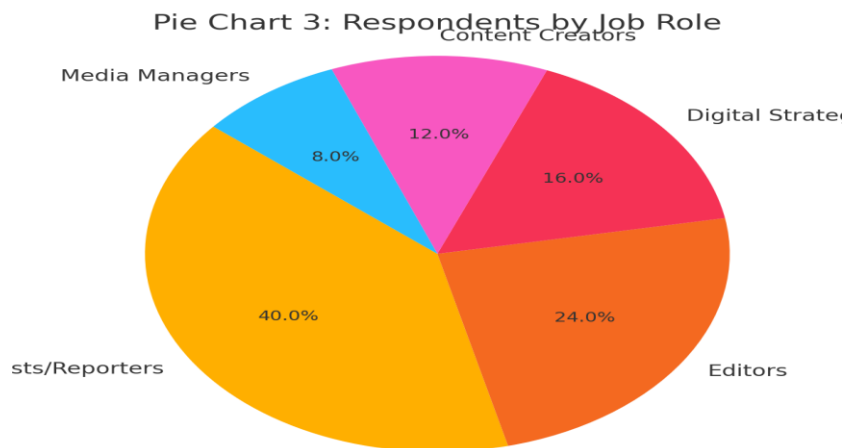


Discussion: This table and chart show the breakdown of respondents by age group among the respondents,

highlighting key trends and patterns relevant to the research objectives.

Table 3: Respondents by Job Role

Category	Frequency	Percentage
Journalists/Reporters	100	40.0%
Editors	60	24.0%
Digital Strategists	40	16.0%
Content Creators	30	12.0%
Media Managers	20	8.0%

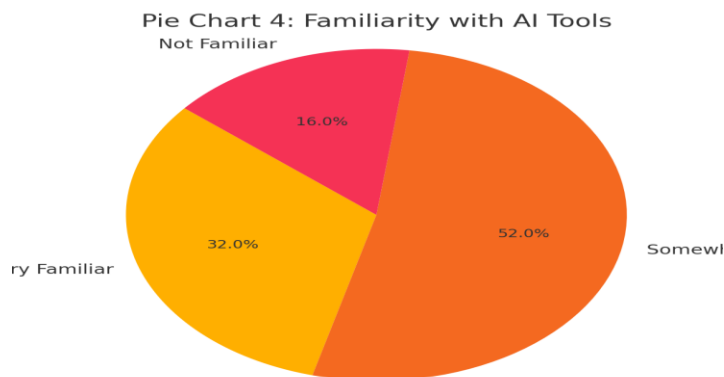


Discussion: This table and chart show the breakdown of respondents by job role among the respondents, highlighting key trends and patterns relevant to the research objectives.



Table 4: Familiarity with AI Tools

Category	Frequency	Percentage
Very Familiar	80	32.0%
Somewhat Familiar	130	52.0%
Not Familiar	40	16.0%

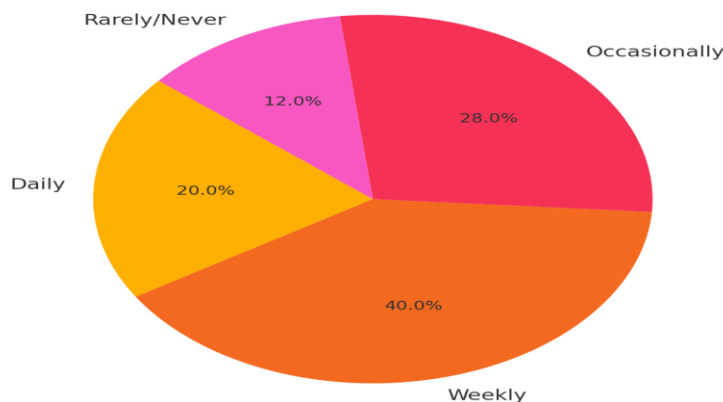


Discussion: This table and chart show the breakdown of familiarity with ai tools among the respondents, highlighting key trends and patterns relevant to the research objectives.

Table 5: Frequency of AI Use

Category	Frequency	Percentage
Daily	50	20.0%
Weekly	100	40.0%
Occasionally	70	28.0%
Rarely/Never	30	12.0%

Pie Chart 5: Frequency of AI Use

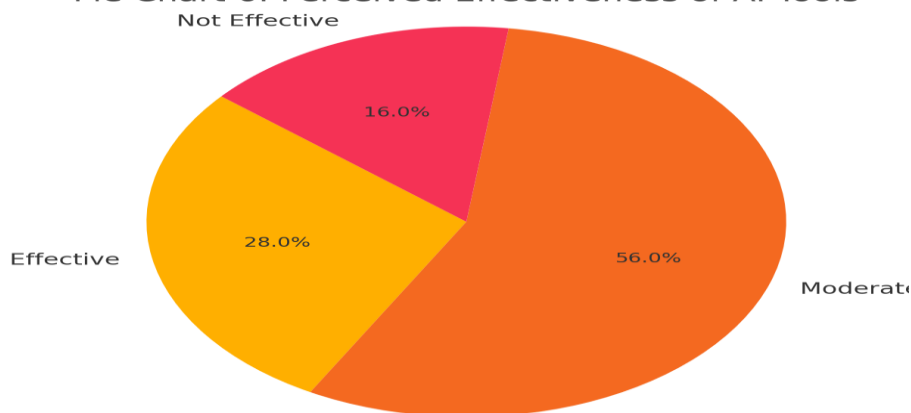


Discussion: This table and chart show the breakdown of frequency of ai use among the respondents, highlighting key trends and patterns relevant to the research objectives.

Table 6: Perceived Effectiveness of AI Tools

Category	Frequency	Percentage
Highly Effective	70	28.0%
Moderately Effective	140	56.0%
Not Effective	40	16.0%

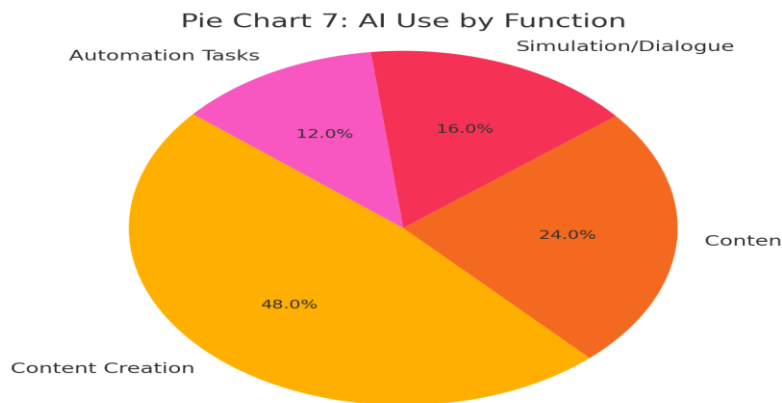
Pie Chart 6: Perceived Effectiveness of AI Tools



Discussion: This table and chart show the breakdown of perceived effectiveness of ai tools among the respondents, highlighting key trends and patterns relevant to the research objectives.

Table 7: AI Use by Function

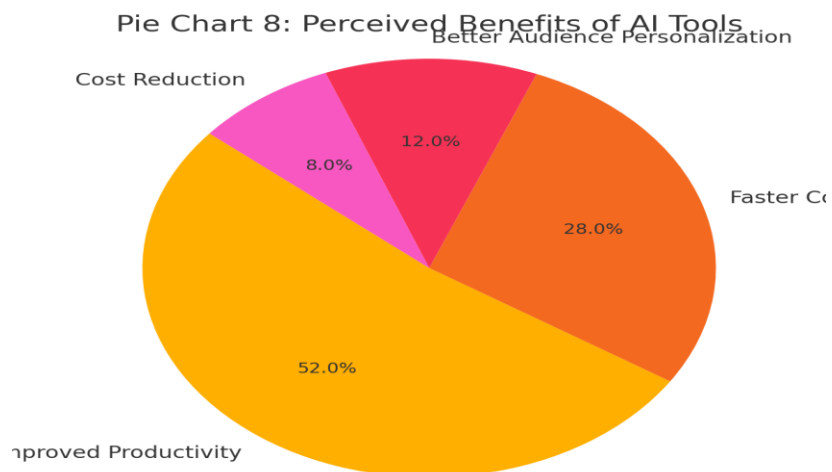
Category	Frequency	Percentage
Content Creation	120	48.0%
Content Curation	60	24.0%
Simulation/Dialogue	40	16.0%
Automation Tasks	30	12.0%



Discussion: This table and chart show the breakdown of ai use by function among the respondents, highlighting key trends and patterns relevant to the research objectives.

Table 8: Perceived Benefits of AI Tools

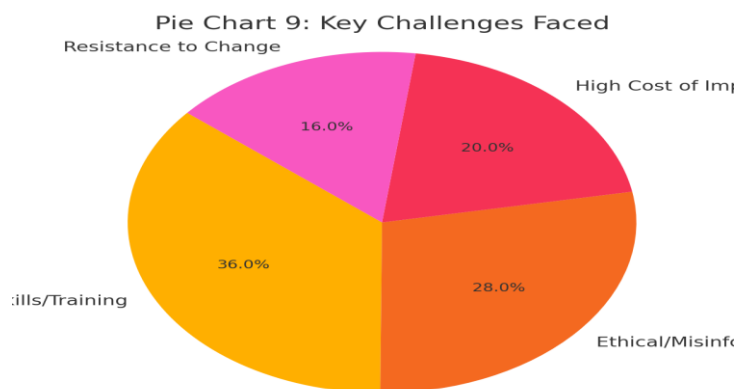
Category	Frequency	Percentage
Improved Productivity	130	52.0%
Faster Content Delivery	70	28.0%
Better Audience Personalization	30	12.0%
Cost Reduction	20	8.0%



Discussion: This table and chart show the breakdown of perceived benefits of ai tools among the respondents, highlighting key trends and patterns relevant to the research objectives.

Table 9: Key Challenges Faced

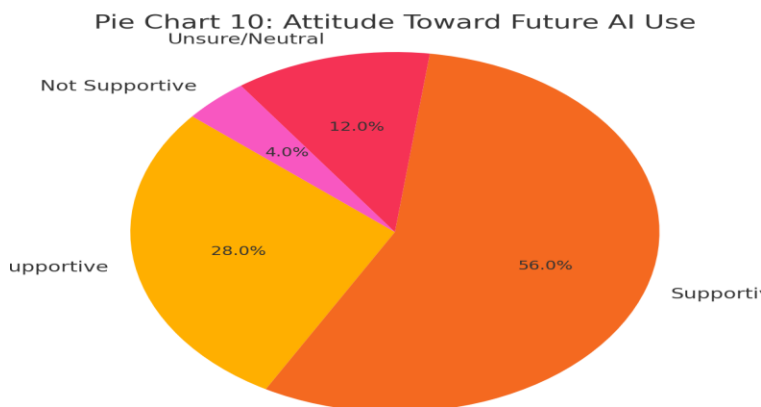
Category	Frequency	Percentage
Lack of Skills/Training	90	36.0%
Ethical/Misinformation Concerns	70	28.0%
High Cost of Implementation	50	20.0%
Resistance to Change	40	16.0%



Discussion: This table and chart show the breakdown of key challenges faced among the respondents, highlighting key trends and patterns relevant to the research objectives.

Table 10: Attitude toward Future AI Use

Category	Frequency	Percentage
Strongly Supportive	70	28.0%
Supportive	140	56.0%
Unsure/Neutral	30	12.0%
Not Supportive	10	4.0%



Discussion: This table and chart show the breakdown of attitude toward future ai use among the respondents, highlighting key trends and patterns relevant to the research objectives.

Findings

Based on the quantitative data analysis of 250 media professionals, the key findings are summarized below:

Demographics and AI Familiarity

The majority of respondents are male (64%) and aged between 20-30 (48%), showing that younger media professionals dominate AI tool usage.

Over half (52%) are somewhat familiar with AI tools like ChatGPT, Deepseek, and Grok, while 32% are very familiar.

Adoption and Use

AI tools are most commonly used for **content creation** (48%) and **content curation** (24%).

40% use AI tools weekly, and 20% use them daily, indicating moderate but consistent integration into media workflows.

Perceived Effectiveness

56% rate AI tools as moderately effective, while 28% find them highly effective, suggesting general satisfaction but clear expectations for improvement.

Benefits

Improved productivity (52%) and faster content delivery (28%) are the main benefits cited, showing that AI mainly supports efficiency gains.

Challenges and Ethical Concerns

Lack of skills/training (36%) and ethical or misinformation risks (28%) are the leading concerns, alongside implementation costs and resistance to change.

Future Outlook

A strong majority (84%) are supportive or strongly supportive of further AI integration in media, reflecting a positive attitude toward AI's evolving role.



Conclusion

The study concludes that Artificial Intelligence particularly tools like ChatGPT, Deepseek, and Grok is steadily transforming media content creation, curation, simulation, and automation. The findings

indicate that while AI is widely acknowledged for enhancing productivity and accelerating content workflows, its successful implementation still depends on addressing key challenges, especially skills development and ethical safeguards.

The overall positive outlook of media professionals demonstrates readiness for AI-driven transformation, but it also underscores the urgent need for clear editorial policies and training programs to ensure AI tools are used responsibly, creatively, and without undermining journalistic integrity.

Recommendations

Based on the findings, the following recommendations are proposed for media organizations, policymakers, and future researchers:

Invest in AI Training and Capacity Building

Develop structured training programs and workshops to upskill journalists, editors, and digital teams to effectively use AI tools in their daily tasks.

Establish Clear Ethical Guidelines

Media organizations should adopt robust editorial guidelines and ethical frameworks to mitigate risks related to misinformation, bias, and loss of editorial oversight.

Ensure Ethical Guidance

Media organizations should have enforcement policies and clear ethical guidance to

potential risks or liability to misinformation and bias, and loss of editorial integrity.

Commit to Meaningful Innovation

Policymakers and industry leaders can create a consistent framework that supports creativity and innovation while also maintaining a degree of accountability with a more blatantly applied AI and audit of algorithms of existing policies and future stakeholder consultations.

Gradual Transition to AI

It is also important that organizations are more gradual and deliberate when transitioning to AI, as staff attitudes towards the adoption of AI are dependent on their willingness to deal with the consequences of the AI and changes to their editorial practices.

Future Research

Future research should build on this proposal exploring larger, or comparative; studies in other countries with a focus on more qualitative knowledge of the implications of AI regarding agency, creativity, trust and newsroom cultures.



References

- Anwar, S., Khan, S. R., Nasir, T., & Azeema, N. (2025). The AI revolution in media, redefining journalism education and professional practice from classroom to newsroom in Pakistan. *Annual Methodological Archive Research Review*, 3(4), 340–354. <https://doi.org/10.63075/4t3nmg72>
- Bradley Peak. (2025). Grok 3 vs ChatGPT vs DeepSeek vs Claude vs Gemini. *CoinTelegraph*. <https://cointelegraph.com/learn/articles/grok-3-vs-chatgpt-vs-deepseek-vs-claude-vs-gemini>
- Chin, C. (2023). *Navigating the risks of artificial intelligence on the digital news landscape*. Center for Strategic and International Studies (CSIS). <https://www.jstor.org/stable/resrep53077>
- Economic Times. (2025). Manus AI stuns tech world with DeepSeek-level performance in complex task handling.
- Edson de Carvalho Souza, M. (2025). Grok, Gemini, ChatGPT and DeepSeek: Comparison and applications in conversational artificial intelligence. *Inteligencia Artificial*. <https://doi.org/10.5281/ZENODO.14885243>
- Hussain, S. A., Anwar, S., Iqbal, N., & Nasir, T. (2025). From newsrooms to algorithms: AI's role in the future of mass communication in Pakistan. *Annual Methodological Archive Research Review*, 3(4), 355–368. <https://doi.org/10.63075/76hgfq50>
- Jana Brnakova. (2025). ChatGPT vs. Gemini vs. DeepSeek: Which AI assistant is the best? *Revolgy*. <https://www.revolgy.com/insights/blog/chatgpt-vs-gemini-vs-deepseek-which-ai-assistant-is-the-best-comparison>
- Khattak, M. S., Nasir, T., Usman, M., & Rahim, S. (2025). AI revolution in digital media: Opportunities, challenges, and the future of journalism in Pakistan. *Annual Methodological Archive Research Review*, 3(4), 398–413. <https://doi.org/10.63075/eer8yc21>
- LLMHacker. (2025). Manus AI: The best autonomous AI agent redefining automation and productivity. *Hugging Face Blog*.
- Nasir, T. (2025). Influence of AI and digital media trends, algorithms and big data on agenda setting and narrative building of media students: A case study of universities in Islamabad. *Social Science Review Archives*, 3(2), 335–355. <https://socialworksreview.com/index.php/Journal/article/view/184/208>
- Nasir, T., Anwar, S. A. S., Iqbal, N., & Arif, M. (2025). The psychological impact of digital media consumption on mental health: A case study of undergraduate students in Pakistan. *Annual Methodological Archive Research Review*, 3(4), 369–382. <https://doi.org/10.63075/7022md02>
- Nasir, T., Siraj, S. A., Hannan, F. Z. U., Hussain, W., & Javed, S. (2024). A perception of university students regarding the influence of social media on academic performance. *Journal of Peace, Development and Communication*, 8(03), 431–450. <https://doi.org/10.36968/JPDC-V07-I01-25>
- PandaYoo. (2025). Manus AI: China's revolutionary AI agent set to disrupt global industries.
- Shen, M., & Yang, Q. (2025). From mind to machine: The rise of Manus AI as a fully autonomous digital agent. *arXiv Preprint*, arXiv:2505.02024.
- Smiju, I. S., & Adinath, D. R. (2025). Advancements in AI-powered NLP models: A critical analysis of ChatGPT and DeepSeek. SSRN. <https://ssrn.com/abstract=5125445>
- Wikipedia. (2025a). *ChatGPT*. Retrieved from <https://en.wikipedia.org/wiki/ChatGPT>
- Wikipedia. (2025b). *DeepSeek*. Retrieved from <https://en.wikipedia.org/wiki/DeepSeek>
- Wikipedia. (2025d). *Grok*. Retrieved from <https://en.wikipedia.org/wiki/Grok>