

THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE FUTURE OF MEDIA PRODUCTION AND CONSUMPTION: A SYSTEMATIC LITERATURE REVIEW

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Abstract

This systematic review examines how artificial intelligence (AI) affects media production and consumption. The review analyzes 17 peer-reviewed articles from Scopus and Web of Science (WoS) databases published between 2020 and 2025. The goal is to develop an integrative framework that synthesizes the diverse impacts of AI across media production, consumption, and ethical governance. The results shed light on the fact that AI can significantly improve efficiency decreasing production time by 35%-60% and, at the same time, increase accessibility; however, the review also notes the salient issues of bias, authenticity, and informational variety. Significant conflicts arise between quality and efficiency, personalization and diversity, and, lastly, between accountability and transparency.

Keywords

Content creation workflows; Algorithmic curation; Filter bubbles; Generative models; Governance frameworks; PRISMA methodology.

Introduction

Artificial intelligence (AI) is one of the most significant revolutions in media and communication, transforming the creation, distribution, curation, and consumption of content. Combining machine learning algorithms, natural language processing, and other computer vision approaches, as well as deep learning paradigms, represents a paradigm shift that disrupts the previously accepted notions of creativity, authorship, and human agency by users of the media system (Shanmugasundaram & Tamilarasu, 2023). In media production, AI-based technologies offer promising opportunities across multiple media modalities. Big language models can generate contextual textual material, and computer vision algorithms can analyze and edit video. These processes hold potential for massive scalability of efficiency, cost-cutting, and democratization of creative outputs through their reduction of barriers to individual content creation (Anantrasirichai & Bull, 2021; Beyari & Hashem, 2025). However, there are prevailing issues with the automation of creative labor, especially its effects on content authenticity, the future of creative labor markets, and the need for human control. The deepfake phenomenon is an example of how unsafe AI-generated content can be in deceiving users and triggering controversial social discussions (Shin & Shin, 2025).

AI-based recommendation platforms are now widespread on the Web, and they gather user data to provide a personalized experience (Gao et al., 2023). This increased individualization also increases the risk of filter bubbles and echo chambers, limiting the range of perspectives available to people and potentially compromising overall civic discourse (Rashid & Kausik, 2024). Although the existing literature has explored different aspects of AI in media, past studies have mainly addressed technical capabilities, specific applications, or distinct ethical contingencies (Anantrasirichai & Bull, 2021; Haleem et al., 2022; Gao et al., 2023; Nah et al., 2023; Prasetyo et al., 2025). There is still a lack of serious research on how automation in production, personalization in consumption, and ethical regulation shape the modern media environment (Mitchelstein & Boczkowski, 2021; Naeem et al., 2025). Based on this, the systematic review aims to fill a gap in existing research by integrating current literature to develop a unifying model that accommodates the diverse impacts of AI across production, consumption, and governance.

The primary goal of this article is to develop an integrative framework that captures the interdependence of AI-driven automation, personalization, and ethical governance across modern media ecosystems.

The review consists of four major sections. Section 1 provides an extensive review of the literature on AI in media production, media consumption, and ethical governance, and identifies the existing research gaps relevant to this study. Section 2 elaborates on the methodology to be used in the research, including the search strategy, inclusion criteria, data extraction approaches, and thematic synthesis, all of which follow PRISMA guidelines. Section 3 summarizes the findings, listing the features of the studies and describing the most commonly used topics across the production, consumption, and governance domains. Section 4 critically discusses these findings in the context of the broader literature, describing the research's theoretical and practical implications and limitations. Finally, the Conclusion section summarizes the primary findings and suggests new research avenues for responsible AI implementation in media ecosystems.

1 Literature Review

1.1 AI in Media Production

The adoption of AI in media production has transformed content-creation processes. Anantrasirichai & Bull (2021) provide an overview of the effects of AI on the creative industries, including the efficiency of the technology in performing repetitive, time-consuming tasks that do not require human assistance, such as video editing, color correction, and format conversion. Their methodological review shows that, though AI has the potential to augment human creativity, it works best when used as an assistant rather than as a replacement for human creative capabilities. These developments have been reported by the media sector, most notably through journalism. Gutiérrez-Caneda et al. (2024) depict the role of AI in transforming newsroom workflows by providing automated data analysis, the generation of narrative material to fill regular news stories, and real-time translation services. However, they note that human control is required to continue to fact-check, make moral judgments, and contextually interpret things, i.e. these areas that AI systems are still not capable of performing reliably. In line with this, Gavran et al. (2025) demonstrate that it is possible to reduce production time by 35-60% when producing audiovisual material; however, the final product's quality remains dependent on human expertise. Some opportunities and challenges emerge with the introduction of generative AI tools. Nah et al. (2023) survey ChatGPT and similar large language models (LLMs) and find that, despite their ability to synthesize and understand contextually suited content in a short amount of time, they produce hallucinations and factual

errors that should be checked. According to Noy & Zhang (2023), AI-powered design tools can save up to 40% while maintaining the same level of quality, whereas creative conceptualization is a human task.

1.2 AI in Media Consumption

The current paradigm of content delivery through digital media has shifted, with AI-driven personalization now a reality. Gao et al. (2023) discuss the presence of AI in advertising, where algorithm-driven systems offer new micro-targeting possibilities never seen before, which increase engagement but also raise ethical issues related to manipulation and privacy. Beyari & Hashem (2025) provide experimental data supporting the effectiveness of personalized social media marketing in increasing user engagement by a factor of 10, thereby demonstrating the commercial feasibility of this strategy. However, algorithmic curation has other ramifications besides commercial metrics. Brantner et al. (2025) used a comparative approach to examine AI-based search engines across five languages. They found on average a systematic bias towards mainstream information, compared to niche or specialized sources. Rashid & Kausik (2024) present a literature synthesis on filter bubbles and echo chambers, concluding that exposure to a variety of opinions and the effects of system design and personal characteristics can be restrictive. However, these are context-specific and do not constitute an inevitable impossibility. Shin & Shin (2025) apply network analysis to show that algorithmic amplification escalates the distribution of misinformation, specifically sensational content given priority by engagement-optimized algorithms. On the other hand, Chemnad & Othman (2024) lists constructive uses, including how AI-enhanced accessibility applications can expand media access for people with disabilities. However, performance gaps remain in non-Western languages and cultural environments.

1.3 Ethical Governance and Accountability

The ethical aspects of AI in media are becoming a focus of academic interest. Zaidan & Ibrahim (2024) examine AI governance in the production, consumption, and regulatory spheres and note a gap between the current regulatory framework and technological capabilities, leading to accountability gaps. They recommend diversity in jurisdictional governance, where principle-based frameworks and prescriptive technical requirements fail to outshine one another definitively. One significant concern raised by various studies is the presence of algorithmic bias. Sonni et al. (2024) find that AI-generated material can be highly technical but lacks contextual sensitivity and cultural competency, as it lacks the training information that humans possess and embraces traditional biases. Munoriyarwa et al. (2021) argue that full-scale ethical systems are a regulatory condition for positive AI applications in the media, emphasizing the concepts of transparency, accountability, and human control. The issues of user autonomy and user agency arise. The experiment conducted by Pizzi et al. (2020) indicates that interactions with AI chatbots may reduce users' feelings of control and agency. Such an observation suggests that the convenience provided by AI can fundamentally change the relationship between humans and technology, though not necessarily. According to Haleem et al. (2022), although AI appears to be an effective way to transform marketing approaches, the question of whether persuasive technologies should be used and to what extent remains ambiguous.

2 Methodology

2.1 Research Design

The current study uses a systematic review of qualitative literature, as per the PRISMA guidelines (Haddaway et al., 2022). The rapidly growing interdisciplinary literature on AI in

media contexts has been organized. The rationale for selecting a qualitative synthesis rather than a quantitative meta-analysis is that the research designs of the selected studies are heterogeneous. Therefore, it is not possible to conduct a homogeneous integrative appraisal that would retain the contextual expectations.

2.2 Research Questions

This research tries to answer the following research questions (RQ):

RQ1: How does AI transform the media production processes as well as creative workflows and professional roles?

RQ2: How does the impact of AI-driven personalization influence the media consumption patterns?

RQ3: What are the ethical issues arising and what governance systems can mitigate these issues?

RQ4: What are the cross-sectional points of these dimensions to form modern media ecosystems?

2.3 Search Strategy

Scopus and WoS were selected as the primary databases because of their systematic indexing, rigorous quality control, and extensive multidisciplinary coverage. Google Scholar was used as a supplementary search engine to capture relevant publications from interdisciplinary journals, thereby ensuring broader coverage of the rapidly evolving AI and media literature. However, given that Google Scholar does not apply strict quality control, only peer-reviewed journal articles retrieved through it were retained for analysis. The search was conducted in December 2024 and was limited to articles published between January 2020 and the search date, reflecting the latest developments in AI since the groundbreaking contributions to LLMs. This approximate five-year window (2020–2025) was selected to capture the rapid evolution of AI technologies following the emergence of transformer-based architectures and LLM, which fundamentally reshaped media production and consumption practices beginning around 2020. The Boolean operator was used: (“artificial intelligence” OR artificial intelligence OR (machine learning) OR (neural network) OR (natural language processing) OR (computer vision) AND (media production) OR (media consumption) OR (journalism) OR (content production) OR (news production) OR (digital media) OR (broad-communicating) OR (audiovisual)). The specific parameters for the filters used per database were: document type (articles only), language (English), and subject areas (communication, media studies, computer science, information systems, social sciences).

To achieve reproducibility, the exact search parameters are hereby presented. In Scopus the search string TITLE-ABS-KEY(("artificial intelligence" OR "machine learning" OR "neural network" OR "natural language processing" OR "computer vision") AND ("media production" OR "media consumption" OR "journalism" OR "content production" OR "news production" OR "digital media" OR "audiovisual")) was applied with filters for document type (Article), language (English), subject areas (Communication, Social Sciences, Computer Science), and publication year (2020–2024). The same query was run in the WoS Core Collection using a Topic search (TS=), which yielded the same Boolean results and was additionally limited to the categories Communication, Sociology, and Computer Science Information Systems, document type (Article), and language (English). These disciplinary subject-area filters served a useful effect, reducing the original result sets by eliminating studies in unrelated disciplines such as engineering and medicine; hence, the explanation of the difference between the available total

number of records and the results when filtered with these filters is presented herein. This initial search was conducted in December 2024. Some of the studies included in the final corpus (Gavran et al., 2025; Brantner et al., 2025; Beyari & Hashem, 2025) were published in early forms prior to the search, and their official publication dates were appointed only in 2025.

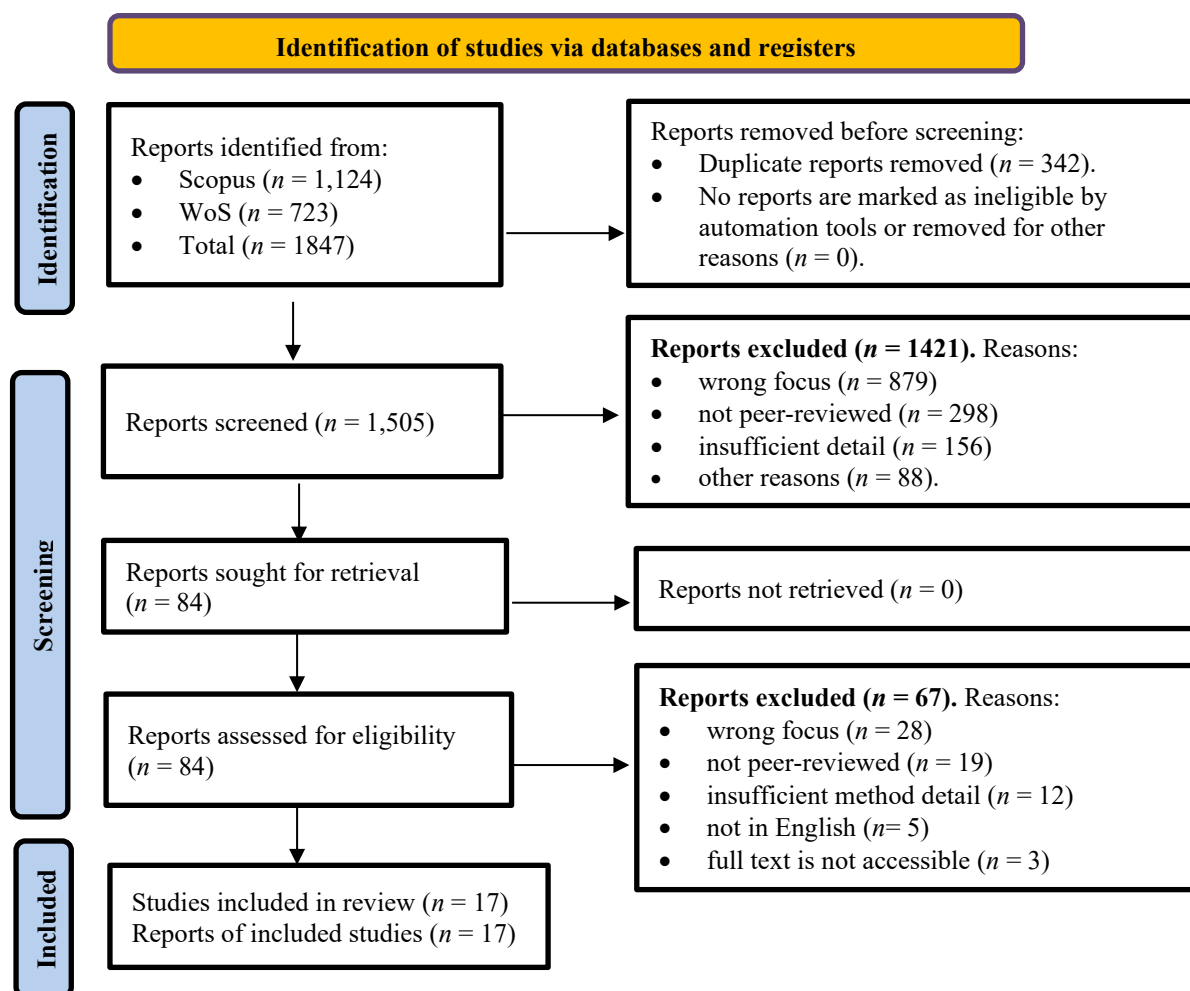
2.4 Selection Criteria and Process

Inclusion criteria: (1) peer-reviewed journal articles; (2) published in the last five years; (3) it should be pertinent to media production/consumption; (4) empirical research or substantive conceptual input; (5) the availability of a full-text article; (6) it must be in English.

Exclusion criteria: (1) conference proceedings, monographs, dissertations; (2) editorials and commentaries; (3) AI applications beyond the context of media; (4) having duplicate reports; (5) a lack of methodological information.

The screening process was conducted in two steps, each executed independently. Stage 1 involved title and abstract screening in accordance with the inclusion criteria; Stage 2 involved full-text screening. Inequalities were addressed through open discussion.

Figure 1 shows the PRISMA flow diagram of the whole selection process.



Source: Own using (Haddaway et al., 2022)

Fig. 1: Systematic literature review by PRISMA flow diagram

It is also important to note that all the articles found in Scopus and WoS have been peer-reviewed as part of journal indexing. However, the exclusion criterion of the lack of a method

description was applied, along with more specific criteria associated with qualitative synthesis. The exclusion of studies was based on inadequate operational descriptions of their research design, sampling plan, or analysis methods, which prevented meaningful cross-study analysis. This criterion was not meant to challenge the peer review of omitted articles, but rather to ensure methodological transparency adequate for integration analysis. Though the resulting corpus of 17 studies can be seen as relatively small compared to the wider body of AI literature, this is attributable to the narrow scope of the intersectional search between AI and media production and consumption, as well as the strict requirements for quality synthesis at the qualitative level. The authors acknowledge that this extra-conservative practice is a drawback.

2.5 Data Extraction and Quality Assessment

The data were tabulated using a standardized sheet that has captured the following dimensions: study characteristics, research design, focal AI technology, media sphere, sample/context, significant findings, limitations, and implications. Quality appraisal used a modified version of the Critical Appraisal Skills Programme criteria, which assesses the understanding of objectives, appropriateness of the design, methodological soundness, quality of analysis, appropriateness of the findings, recognition of limitations and ethical issues. Each study was evaluated separately by both authors, and any differences were resolved through discussions.

2.6 Data Synthesis

The thematic analysis was conducted according to Braun & Clarke (2006). Initial codes were produced through independent coding, based on the research questions, and refined through collective discussion. Three patterns were observed: automation in production processes that AI mediates; individual consumption patterns; ethical governing systems. The individual themes had some subthemes that captured specific patterns.

The investigator's triangulation, referring to the process in which two independent researchers triangulate, or cross-verify, each other's interpretations as a precaution against personal coding bias, strengthened coding consistency, thereby maintaining a robust methodology. In particular, the two authors coded all 17 studies independently based on a deductive framework derived based on the research questions overlaid with inductive codes that were introduced during the coding process. A preliminary codebook was built after pilot coding three randomly selected studies; subsequently, the code definitions were compared and finalized. When complete independent coding of the entire corpus was completed, discrepancies were identified and closed through two consensus meetings during which the original text was collectively re-examined. Since thematic synthesis is an interpretive process, it did not yield formal measures of intercoder reliability (such as Cohen's kappa). Consistency was ensured through the iterative procedures of independent coding, comparison, and consensus.

3 Results

3.1 Study Characteristics

As can be seen in Figure 1, during the first screening 1,847 reports were identified including 1,124 in Scopus and 723 in the WoS. Following the elimination of 342 redundant reports, 1,505 distinct reports remained for examination at the title and abstract level. Among these 1,421 were eliminated because they were irrelevant to the research question (879), had no peer-reviewed journal articles (298), were not described in sufficient detail (156), i.e. studies that lacked adequate methodological description, did not clearly report research design, sample characteristics, or analytical procedures, or were excluded for other reasons (88), including studies focused on AI applications outside the media context, studies with predominantly

technical or engineering focus without relevance to media production or consumption, and non-English language publications identified after initial screening. As a result, 84 full-text articles were considered eligible. After another evaluation that excluded 67 studies deemed unsuitable, a final corpus of 17 studies shown in Table 1 met the research principles.

Tab. 1 *Characteristics of 17 included studies*

Authors (Year)	Design	Domain	Key Findings
Anantrasirichai & Bull (2021)	Systematic review	Creative media	AI excels at repetitive tasks.
Beyari & Hashem (2025)	Experimental	Social media	Personalization enhances engagement.
Brantner et al. (2025)	Comparative	News media	AI shows popularity bias across 5 languages.
Chemnad and Othman (2024)	Survey & Case study	Multiple domains	AI improves accessibility.
Nah et al. (2023)	Conceptual	Multiple	Human-AI collaboration essential.
Gao et al. (2023)	Mixed methods	Advertising	AI enables micro-targeting.
Gavran et al. (2025)	Quasi-experimental	Audiovisual	AI reduces production time 35-60%.
Gutiérrez-Caneda et al. (2024)	Qualitative	General media	AI enhances efficiency; requires ethical frameworks.
Haleem et al. (2022)	Literature review	Marketing	AI transforms marketing practices.
Munoriyarwa et al. (2021)	Conceptual	General media	AI enhances efficiency; requires ethical frameworks.
Noy & Zhang (2023)	Experimental	Creative production	AI increases efficiency by 40% maintaining quality.
Pizzi et al. (2020)	Experimental	Customer service	Users experience reduced agency.
Prasetyo et al. (2025)	Systematic review	Innovation	AI creates hybrid professional roles.
Rashid & Kausik (2024)	Overview	Multiple industries	AI revolutionizes industries.
Shin & Shin (2025)	Network analysis	Social media	AI amplifies misinformation spread.
Sonni et al. (2024)	Systematic review	News production	AI meets standards but lacks depth.
Zaidan & Ibrahim (2024)	Theoretical and analytical approach	Regulation	Governance lags AI capabilities.

Source: Own

The studies in Table 1 were covered for 2020-2025 with a 71% fall in the 2023-2025 category. The geographical distribution of the studies is as follows: 41% in North America; 29% in Europe; 18% in Asia; 12% across two or more countries. The sample is very heterogeneous methodologically with 35% being qualitative case studies, 29% being quantitative surveys and experimental studies, and studies based on mixed-methods or conceptual frameworks.

3.2 Thematic Synthesis

3.2.1 AI-Automation in Production

Several studies have reported the emergence of automated content production and the concomitant increase in the speed of work processes. According to Gavran et al. (2025), professional broadcast apps reduced production time by 35-60%, and Noy and Zhang (2023) states that operational efficiency increased by 40% without sacrificing content quality. However, Gutiérrez-Caneda et al. (2024) state that the challenge of human control is vital in ensuring strict fact-checking and editorial discretion. Labor relations seem more like a redistribution rather than like the abolition of labor. New roles are expected to require a combination of AI skills and a field knowledge (Prasetyo et al., 2025). The issue of content quality is also timely as noted by Aleessawi & Alzubi (2024) since AI-generated content, despite its technical adequacy, often lacks contextual awareness.

Salient patterns across studies are observed in the comparative analysis. Although the efficiency gains reported in both articles by Gavran et al. (2025) and Noy & Zhang (2023) are significant, their results differ in quality. In audiovisual production, Gavran et al. (2025) found that quality depended on human skill; Noy & Zhang (2023), on the other hand, found that quality could be held at minimum levels without further human intervention. Such a discrepancy is probably explained by differences in task type, namely, audiovisual editing and writing. The range of studies leads to the conclusion that artificial intelligence complements human activities rather than eliminating them. Gutierrez-Caneda et al. (2024) reported that AI is used in newsrooms to mechanize repetitive procedures (automated data collection, data writing in a structured format, translation) without allowing machines to make judgment and ethical decisions. Prasetyo et al. (2025) found new hybrid professional positions which are a knowledge combination of domain knowledge and AI literacy. This trend aligns with the findings of Anantrasirichai & Bull (2021), leading to the conclusion that AI is best used as an augmentative tool rather than a substitute for human creative abilities.

3.2.2 Consumption and Personalization

AI algorithms are proven to intensify audience interest (Gao et al., 2023) but also create uncertainties about the balance between diversity and the demands of optimization. Systematic favoritism is found by Brantner et al. (2025) in mainstream sources in five different languages. Filter bubble effects are dependent on platform design and consumer traits, which involve polarization, not embedded as a default but a resultant consequence of algorithmic targeting (Rashid & Kausik, 2024). Shin & Shin (2025) observe that sensationalized content is given preference in such systems. Privacy concerns are another factor that has emerged; Pizzi et al. (2020) report that user agency has been lost despite the perceived convenience of automated personalization, and Chemnad & Othman (2024) argues that people with disabilities might enjoy extra accessibility features already implemented in these systems.

The cross-study comparison shows that algorithmic curation creates structural homogeneity that does not rely on linguistic or cultural context. As noted by Brantner et al. (2025), no language sample (English, German, Swedish, Chinese, or Korean) revealed that AI search engines preferred mainstream outlets to specialized sources. By overlaying these findings with the observation made by Shin & Shin (2025) that engagement-optimized algorithms are increasingly over-rewarding sensational pieces, the authors identify a compounding effect: users are simultaneously directed toward mainstream networks and the most attention-seeking pieces on those networks. Pizzi et al. (2020) also argue that this convenience carries a psychological price; users have expressed a lack of agency despite being pleased with the

personalized results, suggesting that convenience can conceal the decay of autonomous media participation.

3.2.3 Ethical Governance

One of the central accountability deficits is algorithmic opacity (Nah et al., 2023). Some studies reflect the demographic, cultural, and linguistic biases inherent in training data and training design choices (Naeem et al., 2025; Brantner et al., 2025). Governance regimes have fallen behind rapid technological change, and jurisdictions are highly heterogeneous (Naeem et al., 2025). The conflict between innovation and responsibility persists in the marketplace. Competition hinders implementation when thorough testing procedures are not in place.

The issue of governance revealed during the corpus provides insight into a multi-level lack of accountability. On a technical level, Nah et al. (2023) showed that the large language models are opaque enough to have a basic transparency issue, where developers themselves cannot provide a complete explanation. At the data level, Sonni et al. (2024) provided explicit examples of training-data bias, such as the lack of views of American Global South representatives and the use of gendered linguistic forms. Zaidan & Ibrahim (2024) noted that, at the regulatory level, principle-based models offer flexibility but lack specificity in enforcement. In contrast, prescriptive technical standards provide more definitive compliance channels but cannot keep pace with rapid technological development. Synthesis of these results indicates that sound AI control in the media requires a multi-layered implementation of advancing guidelines and industry-specific standards, with significant stakeholder involvement.

3.3 Integrated Framework

These dimensions cannot be viewed independently. Automated production processes enable the most effective personalized consumption, but when production systems introduce biases, they are amplified and distributed at scale. The synthesis identified four areas of tension, namely: (1) efficiency versus quality, productivity gains and the necessity to maintain content integrity are conflicting; (2) personalization versus diversity, there is a tension between making AI more interpretable and the need to introduce more diverse content to audiences; (3) transparency versus performance, and (4) innovation versus accountability, where technological progress challenges the creation of strong governance mechanisms. These tensions are not solvable in the short term by relying solely on technological solutions; instead, long-term negotiation amongst stakeholders is needed to address them.

Discussion

The empirical data show that AI radically reshapes media production, as routine processes are automated, providing efficiency benefits of about 35-60% in mining audiovisual media (Gavran et al., 2025) and about 40% in the design process (Noy & Zhang, 2023). However, it is not just a quantitative change. The creative work process is also being reorganized in ways that make AI handle all technical aspects, while leaving idea generation, fact-checking, and editorial judgment to human practitioners (Gutiérrez-Caneda et al., 2024). As a result, the professional work of media tends to develop hybrid capacities that require both knowledge of the subject and mastery of AI systems (Prasetyo et al., 2025), which implies the redistribution, rather than the elimination, of creative labor.

The level of user engagement can significantly rise due to AI-driven personalization (Beyari & Hashem, 2025; Gao et al., 2023), but this development comes at glaring trade-offs. The literature documents systematic discrimination of mainstream content using various languages (Brantner et al., 2025) and an algorithmic boom of sensational content (Shin & Shin, 2025).

Even though the concept of filter bubbles is not unavoidable, it is a place-based consequence of platform design actions (Rashid & Kausik, 2024). The perceived loss of agency is still reported by consumers despite its convenience, indicating that personalization fundamentally changes the human-technology relationship, and the consequences of this change are not immediately noticeable on the customer side (Pizzi et al., 2020).

Algorithms have created the problem of a lack of accountability through algorithmic opacity (Nah et al., 2023) and have reinforced cultural and demographic inequity by perpetuating bias in training data (Sonni et al., 2024; Zaidan & Ibrahim, 2024). Even available governance mechanisms are well behind the level of technical capacity, and the heterogeneity of jurisdictions impedes collective responses (Zaidan & Ibrahim, 2024). Proper mitigation must be established through robust ethical procedures that consider transparency, accountability, and human control (Munoriyarwa et al., 2021), together with multi-stakeholder involvement in technological pivoting and policy-making.

Production, consumption, and governance are inseparable components that produce pervasive consequences across media ecosystems. When embedded in production processes, personalization algorithms contribute to bias, and governance systems face difficulties in reversing ailments of an ethno-racial nature that circulate across several layers of the system. The result of this interconnectivity is of substantive practical significance. The reason is that organizations cannot address content quality failures by merely facilitating production improvements, because recommender systems will consequently overemphasize engagement at the expense of veracity. Similarly, consumer-directed regulation seems futile unless equal adjustments in production back it.

The four tensions outlined in subsection 3.3 can be clearly observed within the context of stakeholder groups as media organizations have to make trade-offs between the dynamics of performance and editorial integrity; platforms are forced to make choices between user retention and civic duties; and regulatory bodies are pressed to make choices between incentives to innovate and harms. Addressing all these challenges requires concerted action plans that are sensitive to the reverberations of interventions in any given dimension on the rest.

The above discussion constitutes an interpretation of the results of the analyzed corpus. The next paragraphs place the results in a broader modern scholarly context that, although not included in the systematic review corpus, nonetheless provides relevant comparative evidence.

While previous research focused on each dimension separately (Mitchelstein & Boczkowski, 2021), recent systematic reviews have integrated these dimensions more comprehensively. Sonni et al. (2025) documented a 172% surge in AI-journalism research in 2024, revealing that contemporary literature increasingly examines these elements as interconnected phenomena. Similarly, Anter & Ibrahim (2025) found that algorithmic gatekeeping operates through “*socio-technical entanglements*” where automation, personalization algorithms, and governance mechanisms simultaneously shape editorial outcomes.

The review outlines four key tensions within the traditional benefit-harm dichotomy, highlighting multilateral trade-offs requiring stakeholder debate. Recent works reinforce this approach: Papagiannidis et al. (2025) demonstrated that organizations face competing demands between efficiency and ethical compliance, while Anter and Ibrahim (2025) found Arab journalists navigate algorithmic gatekeeping through adaptation or circumvention strategies.

The empirical results foresee substantive changes in media theory: gatekeeping theory must encompass algorithmic gatekeeping; media effects theories must rethink personalization as reinvented exposure patterns; and journalism theory must embrace hybrid human-AI collaborative models. Recent scholarship supports these revisions. Scheffauer et al. (2023)

found citizens prefer journalist gatekeeping for building media trust, suggesting traditional theory must account for both human and algorithmic actors. A study of Voinea (2025) demonstrated that AI-driven recommendation systems create “*reinforcement cycles*” that fundamentally alter news exposure patterns. Systematic review (Hastuti et al., 2025) of 78 studies documented that newsrooms increasingly operate through “*assemblages*” where human editors, metrics, and algorithms co-produce outcomes, validating hybrid human-AI frameworks for contemporary journalism.

The strengths of this study include systematic PRISMA-based implementation, which facilitates reproducibility; an original integrative framework; identification of tensions, which provides analytical value; and recommendations grounded in evidence, which facilitate practical implementation.

The limitations of this study involve a small sample consisting only of 17 studies, which is insufficient to provide geographical coverage; use of articles written only in English, which creates geographical bias; recent advances in AI, which may result in a study lacking up-to-date validity soon; dominance on the Western side of the world, which limits external validity; and qualitative synthesis, which precludes meta-analysis.

Conclusion

This review reveals that AI is inherently transforming media ecosystems across three interconnected aspects: automation in production, personalization in consumption, and regulation of ethical issues. The 17 peer-reviewed articles analyzed indicate vast gains in efficiency (35-60%), unprecedented levels of personalization, and increased accessibility, alongside serious problems such as compromised authenticity, algorithmic manipulation, professional displacement, and loss of information diversity.

The integrative framework shows that these dimensions reinforce each other: automation increases but limits personalization on the one hand, while personalization, on the other, expands opportunities and creates risks, seeming to require governance that is adaptive to innovation without compromising human agency. These four significant tensions, efficiency versus quality, personalization versus diversity, transparency versus performance, and innovation versus accountability, all highlight the idea that AI impacts are complex trade-offs that must continually be negotiated between the stakeholders. Ethical uses of AI in the future will require transparent algorithmic systems, strong human oversight, responsive governance that is cognizant of technological innovations, and the involvement of multiple stakeholders in technology development and policy-making.

Based on these findings, several practical recommendations emerge. Media organizations should design clear policies regarding the use of AI-generated content, including obligatory disclosure of such content, and establish collaboration frameworks between humans and AI that leverage efficiency without sacrificing editorial discretion. Periodic algorithmic audits using training data and optimization strategies should be employed to identify bias, and recommendation engines should be designed to balance personalization with exposure to diverse content. Policymakers should develop adaptive regulatory systems grounded in general principles rather than strict technical specifications, mandate algorithmic transparency, and establish overarching data-use policies. Governance can be effectively managed only through the involvement of technologists, media professionals, civil society, and researchers working collaboratively. In turn, media practitioners should expand their complementary skill sets, focusing on creative conceptualization, strategic analysis, and ethical decision-making. At the same time, technology developers are encouraged to add explainability features, implement active checks for bias, and allow users greater control over personalization.

Several directions for future research emerge from this review. First, longitudinal studies are needed to track how AI-driven media ecosystems evolve, particularly as generative AI models become increasingly sophisticated. Second, research should expand beyond Western-centric samples to include non-English-language media environments and Global South contexts, where AI adoption patterns and regulatory frameworks may differ substantially. Third, empirical investigations into the effectiveness of specific governance interventions, such as algorithmic auditing and mandatory transparency disclosures, would provide policymakers with evidence-based guidance. Fourth, studies examining audience literacy and critical engagement with AI-generated content could inform educational initiatives to foster informed media consumption. Finally, interdisciplinary research combining computational methods with qualitative media studies would offer more nuanced insights into the cultural and societal dimensions of AI integration in media ecosystems.

References

- Aleessawi, N. A. K., & Alzubi, S. F. (2024). The Implications of Artificial Intelligence (AI) on the Quality of Media Content. *Studies in Media and Communication*, 12(4), 41–51. <https://doi.org/10.11114/smc.v12i4.7058>
- Anantrasirichai, N., & Bull, D. (2021). Artificial intelligence in the creative industries: a review. *Artificial Intelligence Review*, 55, 589–656. <https://doi.org/10.1007/s10462-021-10039-7>
- Anter, A., & Ibrahim, N. (2025). New/s Gatekeepers: The Impact of Social Media Algorithms on Arab TV News Coverage. *The International Journal of Press/Politics*. <https://doi.org/10.1177/19401612251370924>
- Beyari, H., & Hashem, T. (2025). The Role of Artificial Intelligence in Personalizing Social Media Marketing Strategies for Enhanced Customer Experience. *Behavioral Sciences*, 15(5), 700. <https://doi.org/10.3390/bs15050700>
- Brantner, C., Karlsson, M., & Kuai, J. (2025). Sourcing behavior and the role of news media in AI-powered search engines in the digital media ecosystem: Comparing political news retrieval across five languages. *Telecommunications Policy*, 49(5), 102952. <https://doi.org/10.1016/j.telpol.2025.102952>
- Chemnad, K., & Othman, A. (2024). Digital accessibility in the era of artificial intelligence—Bibliometric analysis and systematic review. *Frontiers in Artificial Intelligence*, 7, 1349668. <https://doi.org/10.3389/frai.2024.1349668>
- Gao, B., Wang, Y., Xie, H., Hu, Y., & Hu, Y. (2023). Artificial Intelligence in Advertising: Advancements, Challenges, and Ethical Considerations in Targeting, Personalization, Content Creation, and Ad Optimization. *SAGE Open*, 13(4). <https://doi.org/10.1177/21582440231210759>
- Gavran, I., Honcharuk, S., Mykhalov, V., Stepanenko, K., & Tsimokh, N. (2025). The Impact of Artificial Intelligence on the Production and Editing of Audiovisual Content. *Preservation, Digital Technology & Culture*, 54(3), 223–235. <https://doi.org/10.1515/pdte-2025-0022>
- Gutiérrez-Caneda, B., Lindén, C.-G., & Vázquez-Herrero, J. (2024). Ethics and journalistic challenges in the age of artificial intelligence: talking with professionals and experts. *Frontiers in Communication*, 9, 1465178. <https://doi.org/10.3389/fcomm.2024.1465178>

- Haddaway, N. R., Page, M. J., Pritchard, C. C., & McGuinness, L. A. (2022). PRISMA2020: An R package and Shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and Open Synthesis. *Campbell Systematic Reviews: Better Evidence for a Better World*, 18(2). <https://doi.org/10.1002/cl2.1230>
- Haleem, A., Javaid, M., Qadri, M. A., Singh, R. P., & Suman, R. (2022). Artificial intelligence (AI) applications for marketing: A literature-based study. *International Journal of Intelligent Networks*, 3, 119–132. <https://doi.org/10.1016/j.ijin.2022.08.005>
- Hastuti, H., Maulana, H. F., Lawelai, H., & Suherman, A. (2025). Algorithmic influence and media legitimacy: a systematic review of social media's impact on news production. *Frontiers in Communication*, 10, 1667471. <https://doi.org/10.3389/fcomm.2025.1667471>
- Mitchelstein, E., & Boczkowski, P. J. (2021). What a Special Issue on Latin America Teaches Us about Some Key Limitations in the Field of Digital Journalism. *Digital Journalism*, 9(2), 130–135. <https://doi.org/10.1080/21670811.2021.1873813>
- Munoriyarwa, A., Chiumbu, S., & Motsaathebe, G. (2021). Artificial Intelligence Practices in Everyday News Production: The Case of South Africa's Mainstream Newsrooms. *Journalism Practice*, 17(7), 1374–1392. <https://doi.org/10.1080/17512786.2021.1984976>
- Nah, F. F.-H., Zheng, R., Cai, J., Siau, K., & Chen, L. (2023). Generative AI and ChatGPT: Applications, challenges, and AI-human collaboration. *Journal of Information Technology Case and Application Research*, 25(3), 277–304. <https://doi.org/10.1080/15228053.2023.2233814>
- Noy, S., & Zhang, W. (2023). Experimental evidence on the productivity effects of generative artificial intelligence. *Science*, 381(6654), 187–192. <https://doi.org/10.1126/science.adh2586>
- Papagiannidis, E., Mikalef, P., & Conboy, K. (2025). Responsible artificial intelligence governance: A review and research framework. *The Journal of Strategic Information Systems*, 34(2), 101885. <https://doi.org/10.1016/j.jsis.2024.101885>
- Pizzi, G., Scarpi, D., & Pantano, E. (2020). Artificial intelligence and the new forms of interaction: Who has the control when interacting with a chatbot? *Journal of Business Research*, 129, 878–890. <https://doi.org/10.1016/j.jbusres.2020.11.006>
- Prasetyo, M. L., Peranginangin, R. A., Martinovic, N., Ichsan, M., & Wicaksono, H. (2025). Artificial intelligence in open innovation project management: A systematic literature review on technologies, applications, and integration requirements. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(1), 100445. <https://doi.org/10.1016/j.joitmc.2024.100445>
- Rashid, A. B., & Kausik, A. K. (2024). AI revolutionizing industries worldwide: A comprehensive overview of its diverse applications. *Hybrid Advances*, 7, 100277. <https://doi.org/10.1016/j.hybadv.2024.100277>
- Scheffauer, R., Goyanes, M., & de Zúñiga, H. G. (2023). Social media algorithmic versus professional journalists' news selection: Effects of gate keeping on traditional and social media news trust. *Journalism*, 25(4), 755–778. <https://doi.org/10.1177/14648849231179804>

- Shanmugasundaram, M., & Tamilarasu, A. (2023). The impact of digital technology, social media, and artificial intelligence on cognitive functions: a review. *Frontiers in Cognition*, 2, 1203077. <https://doi.org/10.3389/fcogn.2023.1203077>
- Shin, D., & Shin, E. Y. (2025). Cascading falsehoods: mapping the diffusion of misinformation in algorithmic environments. *AI & Society*, 41, 1435–1452. <https://doi.org/10.1007/s00146-025-02575-5>
- Sonni, A. F., Hafied, H., Irwanto, I., & Latuheru, R. (2024). Digital Newsroom Transformation: A Systematic Review of the Impact of Artificial Intelligence on Journalistic Practices, News Narratives, and Ethical Challenges. *Journalism and Media*, 5(4), 1554–1570. <https://doi.org/10.3390/journalmedia5040097>
- Voinea, D. V. (2025). Reconceptualizing Gatekeeping in the Age of Artificial Intelligence: A Theoretical Exploration of Artificial Intelligence-Driven News Curation and Automated Journalism. *Journalism and Media*, 6(2), 68. <https://doi.org/10.3390/journalmedia6020068>
- Zaidan, E., & Ibrahim, I. A. (2024). AI Governance in a Complex and Rapidly Changing Regulatory Landscape: A Global Perspective. *Humanities and Social Sciences Communications*, 11, 1121. <https://doi.org/10.1057/s41599-024-03560-x>

VLIV UMĚLÉ INTELIGENCE NA BUDOUCNOST VÝROBY A POUŽITÍ MÉDIÍ: SYSTEMATICKÝ PŘEHLED LITERATURY

Tento systematický přehled zkoumá, jak umělá inteligence (AI) ovlivňuje produkci a použití médií. Přehled analyzuje 17 recenzovaných článků z databází Scopus a Web of Science (WoS) publikovaných v letech 2020 až 2025. Cílem je vytvořit integrativní rámec, který shrne rozmanité dopady AI na produkci médií, jejich použití a etickou správu. Výsledky poukazují na skutečnost, že AI může výrazně zlepšit efektivitu, zkrátit dobu výroby o 35 % až 60 % a zároveň zvýšit dostupnost; přehled však také poukazuje na významné problémy, jako jsou zaujatost, autenticita a informační rozmanitost. Vznikají významné konflikty mezi kvalitou a efektivitou, personalizací a rozmanitostí a v neposlední řadě mezi odpovědností a transparentností.

DER EINFLUSS KÜNSTLICHER INTELLIGENZ AUF DIE ZUKUNFT DER MEDIENPRODUKTION UND -NUTZUNG: EINE SYSTEMATISCHE LITERATURÜBERSICHT

Diese systematische Übersicht untersucht, wie künstliche Intelligenz (KI) die Medienproduktion und -nutzung beeinflusst. Die Übersicht analysiert 17 begutachtete Artikel aus den Datenbanken Scopus und Web of Science (WoS), die zwischen 2020 und 2025 veröffentlicht wurden. Ziel ist es, einen integrativen Rahmen zu schaffen, der die vielfältigen Auswirkungen von KI auf die Medienproduktion, deren Nutzung und die ethische Verwaltung zusammenfasst. Die Ergebnisse zeigen, dass KI die Effizienz deutlich verbessern, die Produktionszeit um 35 % bis 60 % verkürzen und gleichzeitig die Verfügbarkeit erhöhen kann; der Überblick weist jedoch auch auf erhebliche Probleme wie Voreingenommenheit, Authentizität und Informationsvielfalt hin. Es entstehen erhebliche Konflikte zwischen Qualität und Effizienz, Personalisierung und Vielfalt sowie nicht zuletzt zwischen Verantwortung und Transparenz.

WPŁYW SZTUCZNEJ INTELIGENCJI NA PRZYSZŁOŚĆ PRODUKCJI I KONSUMPCJI MEDIÓW: SYSTEMATYCZNY PRZEGLĄD LITERATURY

W niniejszym systematycznym przeglądzie zbadano, w jaki sposób sztuczna inteligencja (AI) wpływa na produkcję i konsumpcję mediów. W ramach przeglądu przeanalizowano 17 recenzowanych artykułów pochodzących z baz danych Scopus i Web of Science (WoS) opublikowanych w latach 2020–2025. Celem jest stworzenie integracyjnych ram, które pozwolą na syntezę różnorodnych skutków wpływu AI na produkcję mediów, ich konsumpcję oraz etyczną obsługę. Wyniki wskazują, że AI może znacznie poprawić efektywność, skrócić czas produkcji o 35% do 60% i jednocześnie zwiększyć dostępność; przegląd wskazuje jednak również na istotne problemy, takie jak stronniczość, autentyczność i różnorodność informacji. Powstają istotne konflikty między jakością a efektywnością, personalizacją a różnorodnością oraz, co równie ważne, między odpowiedzialnością a przejrzystością.