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Artificial intelligence in the production of multimedia news in Chinese journalism

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Abstract The relevance of this research stems from the rapid implementation of artificial intelligence (AI) in the production of multimedia news within Chinese journalism, which is transforming traditional approaches to the creation, distribution, and perception of information. The aim of the study was to investigate the specifics of AI integration into multimedia content creation in Chinese journalism and to assess its impact on the organisation of media production and content formation. The methodology combined comparative case analysis, systems analysis, analytical generalisation, and conceptual modelling to examine AI integration into multimedia journalism in China. The comparative analysis showed that textual and audio materials remain predominantly semi-automated and require editorial control, whereas video and interactive formats demonstrate a high degree of automation and audience engagement. Case analysis of the Tencent News, ByteDance, and Xinhua Net platforms identified different strategies for utilising AI: Tencent News focuses on efficiency and style standardisation, ByteDance on personalisation and interactivity, and Xinhua Net on content authenticity control and quality. The findings additionally revealed a structural tension between state-regulated information governance and corporate innovation strategies, where AI simultaneously functions as a tool for technological optimisation, audience engagement, and regulatory oversight of content. The study demonstrated that the integration of Natural Language Processing (NLP), generative AI, computer vision, and automated editing technologies enhances multimedia production efficiency, scalability, and content adaptability. The analysis of risks and limitations additionally demonstrated that the use of AI is accompanied by ethical, social, and security challenges, including algorithmic biases, content generation errors, the formation of "filter bubbles", and potential information manipulation. The findings may be useful to media platforms, journalists, editors, AI developers, and researchers in digital communications and media analytics.

Keywords Machine Learning, Content, Digital Media, Media Platforms, Digitalisation

AMS 2010 subject classifications 68T01, 68T50, 91D30

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1. Introduction

The rapid development of artificial intelligence (AI) technologies is significantly transforming journalism, particularly the process of producing multimedia news. In China, AI is actively applied for the automated creation of texts, videos, and analytical materials, enhancing the efficiency and personalisation of informational content. At the same time, these changes are accompanied by challenges related to authenticity, ethics, and the preservation of professional standards. Therefore, studying the use of AI in Chinese journalism is relevant for understanding technological trends, their impact on the structure of the media system, and the formation of new models of information production.

Recent studies examine the broader impact of AI and digital technologies on multimedia journalism, particularly in relation to automated news production, transmedia storytelling, and audience-oriented content adaptation

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[1, 2, 3]. Existing research suggests that AI technologies contribute to accelerating news dissemination, enhancing content personalisation, and expanding multimedia storytelling formats across digital media environments. At the same time, scholars increasingly emphasise the role of AI in transforming investigative reporting practices, interactive communication models, and culturally adaptive multimedia narratives within Chinese digital journalism.

Contemporary research on AI-driven journalism increasingly focuses on newsroom automation, algorithmic governance, and the transformation of editorial practices under conditions of digitalisation [4, 5, 6]. Researchers note that the implementation of ML technologies, Natural Language Processing (NLP) systems, computer vision, and automated content generation tools significantly increases the speed and scalability of multimedia news production. At the same time, these technologies create challenges related to editorial oversight, information verification, and professional journalistic standards. Particular attention is devoted to the Chinese model of "intelligent journalism", where technological innovation is combined with state-regulated information governance and platform-centred media management.

Studies focusing on Chinese media platforms indicate that AI integration may contribute to reducing editorial costs, accelerating material preparation, improving recommendation systems, and adapting multimedia content to social media environments [7, 8]. However, these studies also identify risks associated with content standardisation, increasing dependence on automated systems, and the gradual reduction of the journalist's role in creative and analytical newsroom processes.

Previous research has predominantly focused on the technical aspects of applying AI in news production or on individual cases of digital transformation; however, there is a lack of comprehensive analysis of AI's impact on multimedia content production and journalistic practices within the Chinese media environment. The aim of the research was to study the features of using AI in the production of multimedia news in Chinese journalism and to determine its impact on the organisation of media processes and content formation. To achieve this aim, the study addressed the following objectives: to analyse existing technologies and approaches to applying AI in multimedia news production in China; to identify its impact on the structure of media processes and the professional practices of journalists; to assess the potential advantages and challenges of automation.

2. Materials and Methods

2.1. Research Design

This study was designed as a qualitative theoretical-comparative analysis combining elements of a systematic literature review and comparative case study methodology. The research focused on the integration of AI into multimedia news production in Chinese journalism through the analysis of scholarly literature and publicly available information on leading Chinese multimedia platforms.

2.2. Literature Search Strategy

A comprehensive source base was formed through a systematic search of scientific publications in the Scopus, Web of Science, and Google Scholar databases and included 33 scholarly and analytical sources related to digital media and AI integration. The literature search was conducted using combinations of keywords including "artificial intelligence journalism", "multimedia news", "AI-generated content", "Chinese media", "algorithmic journalism", "digital journalism", and "news personalisation".

The criteria for source selection included publication recency (2021-2025), direct relevance to the research topic, scientific novelty, and practical significance. Additional attention was devoted to studies examining technocratic, socio-digital, and hybrid models of AI integration into news generation, editing, and personalisation processes.

The inclusion criteria comprised peer-reviewed English-language publications published between 2021 and 2025 and directly related to AI integration into journalism and multimedia news production. Sources unrelated to media studies, duplicate publications, and purely technical AI studies without relevance to journalism were excluded from the analysis.

The literature selection process is presented in Figure 1.

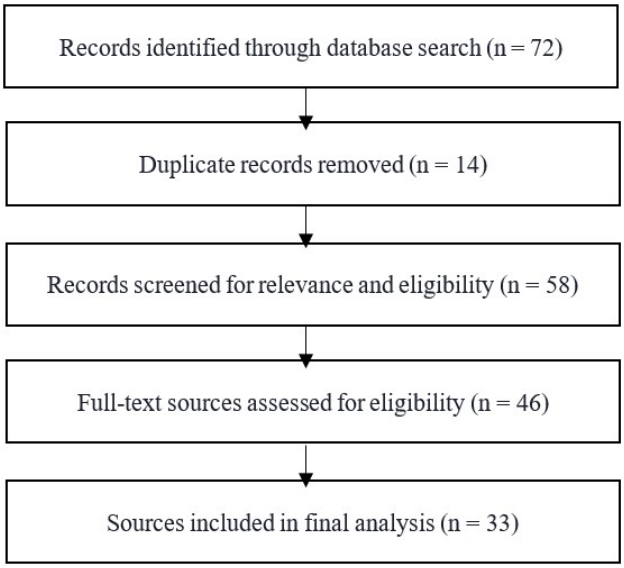

Figure 1. Literature selection and screening process

Source: compiled by the authors.

2.3. Case Selection Criteria

The comparative case analysis focused on Tencent News, Toutiao, Xinhua Net, and ByteDance as representative platforms of the Chinese digital media ecosystem.

The platforms were selected based on differences in ownership structure, audience scale, AI integration strategies, and multimedia content production models, allowing for comparison of distinct approaches to AI-driven journalism within the Chinese digital media ecosystem. The criteria used for comparative case selection are presented in Table 1.

Table 1. Comparative case selection criteria for Chinese multimedia platforms

Platform	**Ownership structure**	**Primary AI functions**	**Audience orientation**	**Reason for selection**
Tencent News	Commercial	NLP, recommendation systems	Mass national audience	Representative commercial AI-driven media platform
Toutiao	Platform-based/private	Personalisation, algorithmic feeds	Mobile-first users	Recommendation-driven content ecosystem
Xinhua Net	State-owned	Verification, moderation	State/national audience	Example of state-controlled AI journalism
ByteDance	Private technology corporation	AR/VR, generative AI	Interactive/global audience	Advanced multimedia automation and interactivity

Note: AR – augmented reality; VR – virtual reality.
Source: compiled by the authors.

The comparative analysis considered the level of AI integration (generation, editing, moderation, personalisation), content production strategies, and publicly described platform functionalities in order to identify differences in AI implementation models.

2.4. Analytical Framework

A systems approach was employed to examine the interconnections between AI technologies, editorial processes, and multimedia content production in Chinese journalism. Analytical generalisation enabled the systematisation of AI application practices across textual, visual, audio, and interactive multimedia formats.

Comparative analysis enabled the juxtaposition of practices, technologies, and outcomes across different research objects to identify patterns and differences. The comparative analysis focused on differences in AI implementation strategies, including content generation, moderation, recommendation systems, personalisation mechanisms, and multimedia automation processes.

The application of this method facilitated the identification of key patterns, advantages, and risks associated with AI integration in different multimedia contexts. Conceptual synthesis was applied to integrate technological, organisational, and ethical dimensions of AI-driven journalism into a unified analytical framework.

2.5. Study Limitations

The study relied exclusively on secondary data and publicly available information sources. Because many Chinese multimedia platforms operate as partially closed digital ecosystems, the analysis was also dependent on publicly available corporate reports, official platform statements, and secondary analytical publications, which may reflect institutional or strategic biases in the representation of AI implementation practices. No primary empirical data, such as interviews, surveys, or proprietary platform analytics, were collected. Furthermore, the study did not have direct access to proprietary recommendation algorithms or internal moderation systems, which limited the possibility of examining the "black-box" mechanisms of AI-driven content distribution.

Therefore, conclusions regarding audience engagement, algorithmic bias, and information manipulation should be interpreted within the scope of theoretical-comparative analysis rather than direct empirical measurement. Thus, the methodological framework provided a structured basis for comparing AI integration models and examining the technological, organisational, and ethical dimensions of AI implementation in Chinese multimedia journalism.

3. Results

3.1. Theoretical and Methodological Analysis of AI Application in Journalism

Multimedia news is defined as complex information products that integrate textual, visual, and auditory content with the aim of providing multi-level communication with the audience. In the scientific literature, the issue of classifying such news is addressed based on several approaches that consider content format, its distribution channel, and the level of production automation. Thus, by format, textual materials, video and infographics, auditory products, as well as interactive multimedia formats that include webinars, interactive graphics, or AR/VR content are distinguished. Depending on the distribution channel, news can be broadcast via traditional media, digital platforms, or hybrid formats combining both types of channels. Particular attention in the classification is paid to the level of production automation: classical news is formed exclusively by journalists, semi-automated materials are created with the support of AI algorithms, and fully automated products are generated without direct human involvement. Such systematisation allows not only for the description of the diversity of multimedia content but also for determining the potential for integrating AI at various stages of production. Table 2 illustrates the conceptual framework within which the synthesis of AI's technological capabilities with editorial practices and media strategic requirements for content quality occurs.

Table 2. Classification of multimedia news by format, channel, and level of automation

Criterion	Category	Example	Level of AI intervention
Format	Textual	News on a portal	Semi-automated
Format	Visual	Infographics, video	Fully automated
Format	Audio	Podcast	Semi-automated
Format	Interactive	AR report	Fully automated
Channel	Traditional	TV, radio	Minimal AI
Channel	Digital	News website	Medium/high AI
Channel	Hybrid	Mobile application	High AI

Source: compiled by the authors based on data analysis of Jaakkola [9].

The analysis of Table 2 shows that contemporary multimedia news production is characterised by a multi-level differentiation based on format, distribution channel, and the level of automation through the application of AI. In terms of format, content is divided into textual, visual, audio, and interactive. Textual and audio news are typically produced in a semi-automated mode, where AI algorithms perform auxiliary functions, such as generating drafts, summarising, or transforming text into synthesised voice, while the journalist controls quality and style. Visual and interactive content, such as infographics, video, or AR reports, demonstrates a high level of automation, as generative models and computer vision allow for the automatic creation, editing, and adaptation of materials for publication on various platforms. The level of AI application is directly dependent on the type of media. Traditional channels, such as television and radio, largely limit themselves to minimal use of algorithms that perform auxiliary analytical and editing functions. In contrast, digital platforms and hybrid solutions, including news websites and mobile applications, actively integrate personalisation technologies, automated content creation, and adaptation to user needs, often involving a medium or high level of AI intervention.

The systemic integration of these criteria demonstrates that the application of AI in multimedia news production is not a homogeneous process. Depending on the format and channel, appropriate technologies and levels of automation are selected, which allows for the optimisation of productivity, increased audience engagement, and ensures the rapid and efficient updating of the information flow.

The use of AI in journalistic practice is justified by a number of theoretical approaches that outline the functional and social aspects of automation. The technocratic approach primarily views AI as a tool for optimising production processes, increasing productivity, and standardising content, emphasising the speed of data collection and processing and the minimisation of human error. The socio-digital approach focuses on the interaction between the audience and media platforms, involving the use of personalisation algorithms, audience analytics, and the adaptation of content to the individual communication needs of users. The hybrid approach combines the advantages of technocratic efficiency and social interactivity, enabling the automated creation of materials while maintaining editorial control and preserving the standards of journalistic ethics. In the context of multimedia news, the hybrid model appears the most promising, as it allows for the synthesis of technological efficiency with the creative contribution of journalists and accounts for the local cultural specificities of content. The integration of AI into multimedia journalism may be interpreted through technocratic, socio-digital, and hybrid approaches, which differ in their prioritisation of automation, audience interaction, and editorial supervision [10, 11].

The technocratic approach is oriented towards maximum process optimisation, increased productivity, and content standardisation, which is critical for operational news platforms and large media companies. The socio-digital approach emphasises content personalisation and audience interaction, integrating consumer behaviour analytics and elements of interactivity, which may contribute to increased user engagement. The hybrid approach combines technocratic efficiency and socio-digital adaptability, ensuring a balance between automation, the creative control of journalists, and adherence to quality standards.

In practice, the hybrid model in Chinese multimedia journalism most commonly functions through a “human-in-the-loop” structure, where AI systems perform preliminary tasks such as content generation, recommendation, sorting, and multimedia adaptation, while journalists and editorial teams retain responsibility for verification, contextual interpretation, ethical assessment, and final publication approval. At the same time, certain large-scale recommendation and moderation systems increasingly operate according to a “human-on-the-loop” logic, where

automated algorithms function continuously under supervisory monitoring rather than direct editorial intervention at every stage. This distinction is important because it demonstrates that the preservation of journalistic ethics depends not only on the presence of human oversight, but also on the degree of editorial authority retained within automated media systems.

The primary AI technologies applied in multimedia news production encompass NLP, generative models, computer vision, and automated editing. NLP technologies enable the automatic generation of texts, translation, summarisation, and sentiment analysis, allowing for the processing of large volumes of data with minimal journalist intervention. Generative models, particularly transformer-based systems, support the creation of textual, visual, and video content based on input data. These technologies expand the possibilities for multimedia storytelling and interactive information visualisation. Computer vision is used for object recognition in images and video, automated editing, and content verification, as well as for the analytics of visual information. Automated editing includes algorithms for colour correction, voice synthesis, and adaptation of materials for various platforms, which significantly shortens the production cycle of multimedia news and enhances production efficiency. The systemic integration of these technologies allows for the formation of comprehensive multimedia products with a high level of automation, while preserving content adaptability and the possibility of editorial control [9]. The technological basis of AI integration in multimedia journalism includes NLP, generative models, computer vision, and automated editing systems. These technologies are applied in automated news generation, multimedia editing, content verification, recommendation systems, and audience-oriented personalisation processes [12].

NLP technologies support automated text generation, summarisation, and sentiment analysis, while generative models expand the possibilities for multimedia storytelling through the creation of textual, visual, and video content. Computer vision and automated editing systems facilitate content verification, video processing, and adaptation of materials for different digital platforms. Collectively, these technologies form an integrated multimedia production ecosystem that combines automation with editorial adaptability and quality control.

3.2. An Overview of China's Digital Media Landscape and AI Implementation Strategies

China's digital media environment is characterised by a high concentration of media assets and an integrated regulatory system, ensuring a balance between state control and corporate innovation. Key structural features include a multi-tiered hierarchy of media organisations, where national state agencies interact with leading digital platforms, such as Tencent News, Xinhua Net, and ByteDance. A distinctive feature of the Chinese digital media landscape is its integration across textual, audiovisual, and interactive communication channels. This multi-format structure allows platforms to address diverse audience preferences and consumption patterns. The high level of integration of Big Data technologies and algorithmic analytics allows for real-time tracking of user interests, predicting consumer trends, and optimising multimedia news formats. Thus, the Chinese media environment can be viewed as a high-tech ecosystem where state regulation, digital platforms, and innovative technologies exist in a constant dynamic balance [13].

China's state policy in the digitalisation of media combines regulatory and strategic tools aimed at ensuring control over information flows and implementing advanced technologies, particularly AI. At the state level, special attention is paid to forming the normative foundations for AI application in journalism, developing national multimedia news platforms, and supporting scientific research in computer vision, NLP, and generative models. Corporate strategies are distinguished by a high level of technological autonomy and are aimed at monetising digital content through personalisation, adaptation for mobile and web platforms, and the integration of interactive formats [14]. In this context, a symbiosis of state control and market competition is observed: state initiatives ensure standardisation and ethical frameworks, while corporations focus on optimising content production, automating workflows, and increasing audience engagement.

Contemporary Chinese multimedia platforms demonstrate the integration of advanced AI technologies at all stages of content production. Platforms such as Tencent News and Toutiao actively employ personalisation algorithms, automated content generation systems, and computer vision technologies. These tools support multimedia editing, recommendation processes, and content verification across textual, audio, and video formats. These solutions are designed to reduce the time from information gathering to publication while enabling adaptive multimedia content distribution. Significant attention is also paid to the integration of multimedia technologies,

such as AR/VR and interactive graphics, which forms a new level of media-cultural interaction and contributes to increasing consumer engagement with information [15].

To provide a comparative overview of AI implementation across selected Chinese multimedia platforms, a chronological summary of major AI integration stages and technological features was compiled based on publicly available platform reports and analytical materials (Table 3).

Table 3. Comparative timeline of AI integration across selected Chinese multimedia platforms

Year	Platform	AI implementation feature	Primary function
2021	Tencent News	AI-assisted recommendation optimisation	Content personalisation
2021	Xinhua Net	Automated video update systems	News automation and verification
2022	Toutiao	NLP-based dynamic content sorting	Personalised news distribution
2022	ByteDance	AI-enhanced multimedia editing	Automated audio-video production
2023	Tencent News	Generative AI-assisted news digests	Automated text generation
2023	ByteDance	AR/VR interactive reporting tools	Audience engagement and interactivity
2024	Xinhua Net	AI-based fake content detection systems	Verification and information security
2024	Toutiao	Advanced recommendation algorithms using Big Data and ML	Adaptive content delivery

Source: compiled by the authors based on publicly available platform materials and analytical sources [4, 14, 16].

The comparative timeline demonstrates that AI implementation across Chinese multimedia platforms developed progressively from basic recommendation and automation systems toward more complex generative, interactive, and verification-oriented technologies. It also highlights differences in strategic priorities between commercial, platform-based, and state-oriented media ecosystems.

Table 4 illustrates the key multimedia news platforms in China and the methods of integrating AI into content creation, editing, and personalisation processes. The analysis of the platforms shows that AI application in Chinese media occurs at various levels: from the automated creation of textual materials to the generation of interactive and visual content, including video and AR/VR reports.

Table 4. Key multimedia platforms in China and AI application

Platform	Main Functions	AI Usage	Examples of Innovative Solutions
Tencent News	News, video, interactive	NLP, generative models, computer vision	AI reports, personalised digests
Toutiao	Personalised news feeds	NLP, Big Data, ML	Dynamic content sorting, recommendations
Xinhua Net	State news, analytics	Computer vision, NLP	Automatic video updates, fake news detection
ByteDance	Mobile and digital platforms	Generative models, AI editing	AR/VR reports, interactive stories

Source: compiled by the authors based on data analysis of Bendida et al. [13]; Lan & Liu [15].

The comparative analysis demonstrates that AI integration on Chinese multimedia platforms extends beyond technological automation. AI systems increasingly reshape newsroom workflows, editorial priorities, and audience-management strategies. Routine journalistic functions, including content sorting, preliminary drafting, multimedia adaptation, and recommendation management, are progressively delegated to algorithmic systems, potentially

allowing editorial teams to focus more strongly on verification, contextualisation, and strategic content supervision. At the same time, the differing priorities of Tencent News, ByteDance, and Xinhua Net illustrate how AI implementation reshapes journalistic practices in distinct ways: commercial platforms appear to prioritise audience retention and adaptive personalisation, whereas state-oriented media focus more heavily on content verification, narrative consistency, and information control.

The systematic interaction between state initiatives and corporate strategies in the digitalisation of China's media and the integration of AI technologies is presented in Figure 2. It demonstrates that the implementation of AI in multimedia platforms does not occur in isolation but within a comprehensive management and technological environment, where state and corporate actors perform complementary roles.

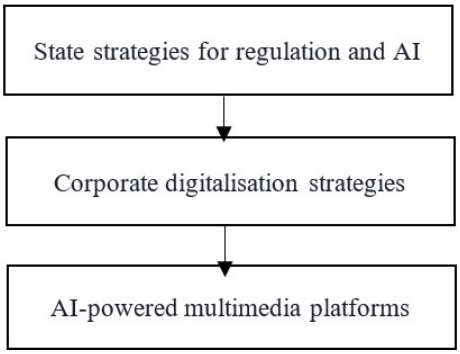

Figure 2. Interaction of state and corporate strategies with AI technologies

Source: compiled by the authors based on data analysis of Gao et al. [16]

Figure 2 demonstrates that AI integration in Chinese multimedia journalism operates within a multi-level system combining regulatory governance, corporate innovation, and platform-level technological implementation. This structure may accelerate content production processes while redistributing editorial authority between automated systems, platform management, and state-controlled regulatory mechanisms.

3.3. Evaluation of AI Integration into Multimedia Content Production

3.3.1. AI Automation in Multimedia News Production

The integration of AI technologies into the text content production process substantially transforms traditional journalistic practices. NLP algorithms and generative models enable the automatic processing of large volumes of information, extracting key facts, structuring data, and forming textual news in a format that conforms to a specific publication's style. For example, automated news generation systems support the rapid transformation of analytical reports and press releases into finished articles, significantly shortening the time between an event and its publication. At the same time, automation not only increases productivity but also necessitates the correction of algorithmic biases, as AI can misinterpret data or distort context. Practical cases on platforms like Tencent News demonstrate that semi-automated text creation combined with human editing ensures a balance between production speed and journalistic accuracy [17].

Generative models and computer vision algorithms expand the possibilities for creating audio-visual and interactive content. Thus, automated video editing systems enable the creation of dynamic reports, including frame adaptation, voice synthesis, and the integration of animated elements. Interactive formats, such as AR/VR reports, provide users with the opportunity to take an active role in information perception, which may contribute to increased audience engagement and content personalisation. The practical application of these technologies on platforms like ByteDance and Toutiao demonstrates that integrating AI into audio and video material creation supports high production speed and content adaptability to different devices and consumption channels.

One of the key aspects of AI application in journalism is the level of automation in producing different types of multimedia content. Table 5 presents a comparison of the main content categories used in contemporary Chinese

journalism, indicating typical AI application examples, the degree of automation, and implementation effectiveness notes.

Table 5. Comparison of multimedia content automation levels

Content type	Application example	Level of AI intervention	Effectiveness notes
Textual	News articles, digests	Semi-automated	Requires editorial verification
Video	AI reports, video editing	Fully automated	Accelerates material output
Audio	Podcasts, voice synthesis	Semi-automated	High accuracy of text transformation
Interactive	AR/VR reports	Fully automated	Increases audience engagement

Source: compiled by the authors based on data analysis of Xiang & Cai [18].

The presented comparison illustrates the varying levels of AI intervention across different multimedia content formats. Table 5 shows that the level of AI intervention varies depending on the content type. Text and audio content are most often subject to semi-automated production, requiring additional editorial verification to ensure reliability and stylistic accuracy. Meanwhile, video and interactive content production demonstrates a trend towards full automation, which significantly accelerates the material creation process and increases audience engagement, particularly in AR/VR formats. AI systems are frequently applied in text and audio production to support summarisation, voice synthesis, and digest generation. These technologies reduce preparation time while still requiring editorial verification and quality control. For video and interactive content, automation allows for the rapid generation of materials that previously required significant resources, although it remains important to control quality and information veracity. Overall, the analysis indicates that the integration of AI into multimedia news production is systemic, where different content formats demonstrate varying automation potential and require a differentiated approach to quality control and editorial intervention.

3.3.2. Imageeeee

Personalisation and recommendation systems are a key tool for enhancing the effectiveness of multimedia platforms. ML algorithms analyse user behaviour, their content consumption history, and preferences, enabling the formation of individual news feeds tailored to a specific consumer. In practice, this may increase user interaction with platform content. At the same time, algorithmic personalisation raises ethical questions, particularly related to "filter bubbles" and the potential skewing of the information agenda. Analysis of cases from Chinese platforms, such as Toutiao, shows that using AI recommendations in combination with editorial control may help balance personalisation and information reliability [19]. Figure 3 demonstrates the sequence of processes through which information passes from the collection of user data to the generation of personalised news feeds.

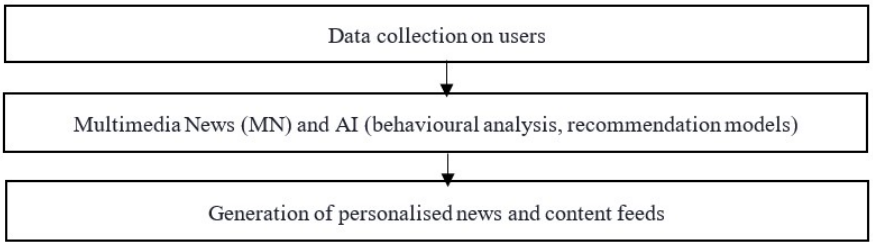

Figure 3. The mechanism of multimedia content personalisation using AI

Source: compiled by the authors based on data analysis of Xu & Flew [20].

Figure 3 illustrates the cyclical and adaptive nature of AI-driven content personalisation, where user data, recommendation algorithms, and multimedia news feeds continuously interact within a dynamic feedback system.

This process may enhance audience engagement and platform adaptability while simultaneously increasing the influence of algorithmic filtering on information visibility and news consumption patterns.

3.3.3. Platform-Based Models of AI Integration

The practical application of AI on Chinese media platforms demonstrates a systemic transformation of multimedia content creation processes, encompassing all stages: from data collection to publication and personalisation of materials. On the Tencent News platform, generative models and NLP algorithms are applied not only for the automatic generation of textual digests but also for creating comprehensive multimedia modules, which include video, interactive graphics, and infographics. This combination allows for the rapid integration of news from various sources into a unified multimedia product while preserving editorial integrity and the publication's style. It is important to note that semi-automated systems enable editors to focus on the analytical aspects of content, while AI handles routine tasks, potentially increasing productivity and the speed of material publication.

On the ByteDance platform, AI integration is aimed at creating audiovisual and interactive content, including AR/VR reports. Generative algorithms ensure the modelling of three-dimensional scenes and real-time event simulations, creating new forms of interactive audience engagement. AI editing of video materials encompasses automated montage, colour correction, voice synthesis, and the integration of audio elements, enabling content production at scale while maintaining high quality and individual stylistic approach. Furthermore, ML algorithms on the platform analyse user preferences and interaction with content, adapting media products to a specific audience segment.

In turn, Xinhua Net exemplifies the use of AI for ensuring content credibility and quality control. Computer vision allows for the automatic verification of video materials for the presence of manipulations, unauthorised inserts, or editing errors, while NLP modules analyse textual news for semantic consistency with original sources. This approach not only accelerates the material preparation process but also enhances the reliability and operational efficiency of the media flow, which is critically important for state and regional platforms where information accuracy is of paramount importance [13, 15].

A comprehensive analysis of the case study data allows for the identification of several key factors for effective AI integration. First and foremost, the synergy of algorithmic automation and expert oversight ensures the accuracy and quality of content, minimising the risks of erroneous or distorted data. Moreover, the integration of multifunctional AI solutions – NLP, computer vision, generative models, and personalisation systems – optimises each stage of multimedia content production, from data collection to audience adaptation of materials. Finally, the focus on personalisation and interactivity may contribute to increased user engagement while simultaneously expanding the audience and maintaining content relevance across different formats and channels. An important aspect is also the ethical and regulatory dimension. When implementing AI, it is necessary to consider potential algorithm biases, ensure transparency of personalisation processes, and adhere to editorial standards. Chinese platforms demonstrate that combining technological innovation with editorial accountability is key to the successful integration of AI into multimedia production.

In the contemporary Chinese media landscape, the integration of AI into multimedia content production serves as an important factor for potentially enhancing the efficiency, speed, and personalisation of journalistic processes. The comparison of Chinese multimedia platforms demonstrates that AI integration strategies differ according to organisational priorities and communication models. Tencent News primarily focuses on workflow optimisation and automated multimedia generation, ByteDance emphasises audience engagement and interactive personalisation, whereas Xinhua Net prioritises information verification and narrative consistency within a state-regulated media framework. These differences indicate that AI implementation in Chinese journalism is shaped not only by technological capacity but also by editorial objectives, platform governance models, and audience management strategies [21].

Consequently, AI integration not only transforms technical production processes but also influences the epistemological foundations of journalism by shifting the criteria through which news relevance, visibility, and credibility are algorithmically prioritised and distributed.

3.4. Analytical Assessment of the Advantages, Risks, and Limitations of AI Implementation

3.4.1. Operational Advantages and Multimedia Automation The integration of AI into multimedia content production on Chinese media platforms demonstrates significant transformative potential for multimedia news production and audience-oriented content distribution. Technologies such as NLP, generative models, computer vision, and automated editing enable the reduction of preparation time for textual, audio, and video materials, standardise publication style, and ensure a high degree of content personalisation for the audience.

These systems are designed to optimise internal production workflows but also enhance platform competitiveness within a dynamic media environment where response speed to current events is critical. The implementation of AI technologies in data collection, content generation, and editing processes facilitates the creation of multimedia content at a scale previously requiring significant human resources, while maintaining high standards of information quality and visual presentation.

3.4.2. Algorithmic Bias, Governance, and Editorial Oversight

Concurrently, the use of AI gives rise to a complex array of ethical and socio-political challenges that necessitate careful analysis and regulation. Automatically generated texts and videos may reflect biases inherent in the algorithms' training data or distort information in cases of imprecise context recognition. In the Chinese media environment, these biases may also be reinforced by the selective nature of training datasets shaped by state-regulated information policies and content filtering practices. As a result, recommendation and moderation systems may prioritise officially endorsed narratives while reducing the visibility of politically sensitive or alternative viewpoints. The "black-box" structure of such algorithms complicates independent assessment of how content prioritisation, suppression, or visibility decisions are produced within platform ecosystems. This issue is particularly significant in politically sensitive news contexts where algorithmic visibility and content prioritisation may directly influence public discourse and information accessibility.

Algorithms for automated fact-checking and computer vision partially mitigate the risks of misinformation dissemination; however, editorial accountability for AI-assisted content ultimately requires human oversight and verification. A crucial aspect is a hybrid approach that combines algorithmic automation with expert oversight, ensuring a balance between operational efficiency, accuracy, and the ethical standards of journalism. Within this model, automated systems perform rapid content generation, filtering, and recommendation tasks, while editorial teams and regulatory mechanisms retain supervisory functions related to fact verification, contextual accuracy, and compliance with political and ethical standards. Such interaction partially mitigates algorithmic errors and content distortions; however, it simultaneously increases the dependence of media ecosystems on centralised moderation and governance structures.

In practice, this oversight model combines elements of both "human-in-the-loop" and "human-on-the-loop" governance. Sensitive political materials, verification procedures, and high-visibility publications typically remain subject to direct editorial approval, whereas large-scale recommendation and moderation systems often operate through continuous algorithmic monitoring supervised by editorial and regulatory structures. As a result, human oversight in Chinese AI-driven journalism functions not only as a quality-control mechanism, but also as a regulatory instrument shaping content visibility, political sensitivity, and narrative consistency.

Furthermore, the active use of AI raises questions regarding potential information manipulation, selective visibility control, and algorithm-assisted censorship. Content personalisation algorithms create the risk of forming "filter bubbles", where users receive limited, selective content that influences their perception of reality and can contribute to politically biased information. Combined with centralised control over media flows, this may pose a potential threat to pluralism of thought and press freedom. Automated content moderation and verification mechanisms, actively implemented on platforms such as Xinhua Net and ByteDance, can be used as tools for censorship or for shaping a desired information narrative, necessitating heightened attention to regulatory and ethical aspects.

3.4.3. Personalisation, Information Control, and Comparative Platform Governance

A notable example of algorithm-driven personalisation in the Chinese media environment is the recommendation system used by Toutiao. The platform dynamically adapts news feeds according to user behaviour, browsing

history, and interaction patterns. While this approach is intended to increase audience engagement and platform retention, it also contributes to the formation of "filter bubbles", where users are repeatedly exposed to ideologically or behaviourally similar content. Compared to Meta's News Feed algorithms, which primarily prioritise engagement and advertising optimisation within a relatively decentralised global ecosystem, Chinese recommendation systems operate within a more centralised regulatory environment. This environment is characterised by stronger state oversight and more extensive content governance mechanisms. This regulatory framework may partially reduce the spread of certain forms of disinformation; however, it also increases the potential for informational selectivity and narrative control.

In comparison with non-Chinese media organisations such as Reuters, where AI-assisted journalism is primarily applied to support newsroom efficiency, data analysis, and semi-automated reporting under decentralised editorial supervision, Chinese multimedia platforms demonstrate a substantially higher level of integration between algorithmic personalisation, platform governance, and regulatory oversight. This distinction highlights the specificity of the Chinese model, where AI systems function not only as technological tools for content production but also as instruments shaping information visibility, moderation practices, and audience management within a state-regulated digital environment [22].

3.4.4. Synthetic Media and Deepfake Risks

An additional challenge associated with AI integration is the growing use of synthetic media and deepfake technologies in digital communication environments. In the Chinese context, the rapid expansion of generative AI tools has increased concerns regarding manipulated audiovisual content, identity simulation, and the dissemination of misleading information. Public debates surrounding AI-generated virtual news anchors and synthetic video presenters on Chinese state-affiliated media platforms have intensified concerns regarding the authenticity and transparency of digitally generated media content [14]. At the same time, China has introduced relatively strict regulatory measures governing generative AI and synthetic content, including requirements for content labelling, algorithm registration, and state supervision of AI-generated media [16]. Although these measures may mitigate certain disinformation risks, they simultaneously reinforce centralised control over digital communication and media narratives.

Table 6 presents an analytical assessment of the advantages and risks of integrating AI into multimedia platforms.

Table 6. Analytical assessment of advantages and risks of AI integration into multimedia platforms

Assessment category	**Advantages**	**Risks and limitations**
Efficiency and operational speed	Reduction of production time, standardisation, personalisation	Excessive reliance on algorithms, risk of technical errors
Ethical challenges	Enhanced content quality through automated verification	Potential algorithmic biases, text generation errors
Information security	Rapid content moderation and control	Risks of selective information exposure and algorithmic narrative shaping, formation of "filter bubbles", potential for algorithm-assisted content filtering and centralised moderation
Social interaction	Personalised recommendations increase user engagement	Limitation of users' information field, potential impact on public opinion
Technological integration	Combining various AI technologies ensures scalability and production speed	High development and maintenance costs, complexity of integrating disparate systems

Source: compiled by the authors based on data analysis of Li [23].

A systematic analysis of these factors leads to the conclusion that the integration of AI into multimedia content production is a dual-faceted process: on one hand, it ensures high productivity, standardisation, and personalisation; on the other hand, it generates ethical, social, and political risks that require clear regulation and the implementation of control mechanisms. The most effective approach is the combination of technological solutions with human

supervision and editorial control, which allows for the optimisation of production processes, minimisation of risks, and enhancement of audience trust in digital content.

For a comprehensive analysis of AI integration into multimedia content production, it is pertinent to present Figure 4, which illustrates the interrelationship between the advantages, risks, and limitations of the technology across key categories: efficiency, ethics, information security, and social interaction.

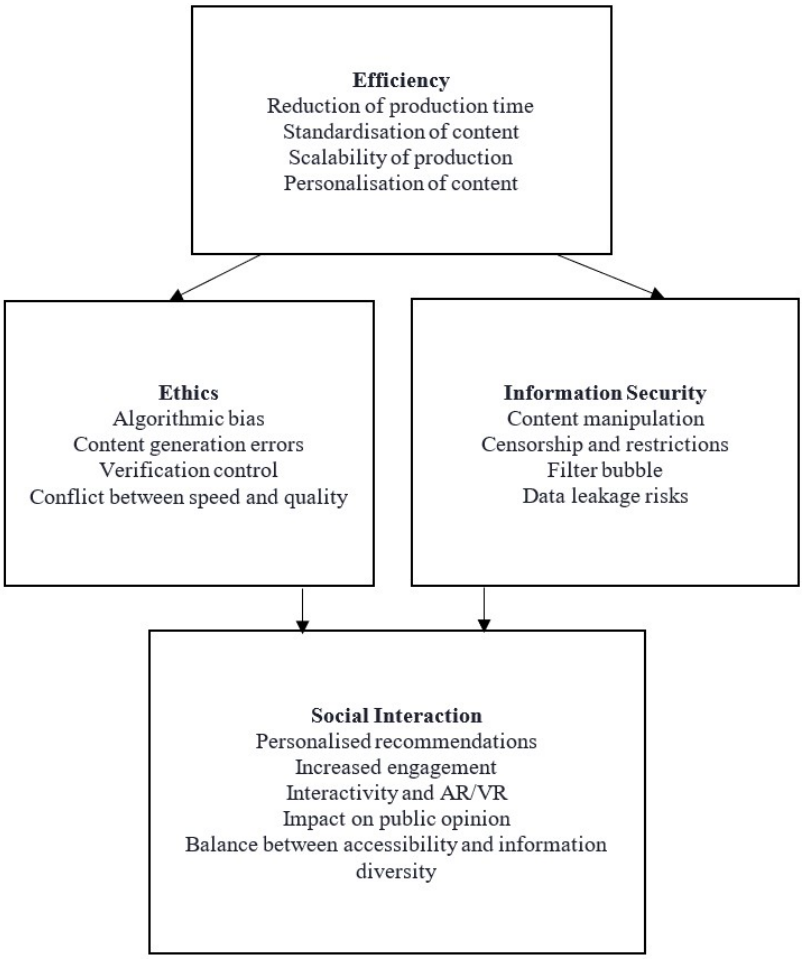

Figure 4. Interaction between benefits, risks, and limitations of AI integration in multimedia journalism

Source: compiled by the authors based on data analysis of Abdulmajeed & Fahmy [24].

Thus, Figure 4 reflects the multidimensional nature of AI's impact, where each category is in complex interaction with the others: benefits may be amplified or offset by risks, and limitations become a catalyst for implementing additional regulatory and control mechanisms. The schema demonstrates that the integration of AI into multimedia journalism involves interconnected technological, ethical, informational, and social dimensions. While automation and personalisation improve efficiency and audience engagement, they simultaneously generate risks associated with algorithmic bias, information selectivity, and content governance. The framework highlights the importance of balancing technological innovation with editorial accountability and ethical regulation [24].

Overall, the findings demonstrate that the effectiveness of AI integration in Chinese multimedia journalism depends not only on technological sophistication but also on the ability to balance automation with editorial accountability, transparency, and ethical governance. Although AI may significantly enhance the speed, scalability,

and adaptability of multimedia content production, its implementation simultaneously generates risks associated with algorithmic bias, information selectivity, and automated content governance. In this context, the most sustainable model of AI implementation is a hybrid approach combining technological innovation with human oversight, editorial verification, and regulatory safeguards.

4. Discussion

4.1. AI Integration and Editorial Transformation

Research from 2021-2025 shows a common trend towards combining generative AI algorithms with audience analytics tools, which may contribute to increased efficiency in editorial processes and material personalisation. This confirms the relevance of the conducted study, which also assesses the performance of algorithms at various stages of the journalistic cycle: from generation to editing and content distribution.

In particular, the article by Chetouani [25] explores the change in journalistic practices under the influence of AI, with special attention paid to the transformation of the journalist's role as a curator of automatically generated content. The author indicated that the main challenge lies in balancing human editorial ethics with algorithmic efficiency. The findings of the present study are consistent with this trend: human control remains the determining factor in ensuring the credibility and quality of information, although automated models may significantly accelerate material preparation. Concurrently, the work of Li [26] describes technological models for automated content production in journalism, art, and media, including the use of multimodal generators (text + image + video). The author showed that such systems are capable of creating adaptive narratives depending on the audience. The findings of the present study are consistent with these observations, as the structural-functional analysis also indicated the potential effectiveness of AI-driven content personalisation algorithms. However, unlike Li, the present study also reveals the analytical component: assessing the accuracy, logical coherence, and compliance of generated materials with editorial standards.

The research by Hassan & Albayari [27] analyses AI integration in the context of the Fourth Industrial Revolution, highlighting the potential for journalism automation through big data and robotic systems. The authors' results confirmed a key thesis of the conducted study regarding the systemic role of AI in enhancing the speed, personalisation, and quality of multimedia content. Thus, both studies suggest that effective AI implementation requires a balance between technological capabilities and editorial control to ensure the credibility and ethics of media. In the article by Pavlik [22], the collaboration of journalists with generative models, particularly ChatGPT, is examined in the context of transforming journalism education. The author noted that integrating such models fosters the development of new forms of editorial interaction and digital literacy among future journalists. Despite the pedagogical focus of Pavlik's research, the obtained results are fully correlated regarding the systemic nature of AI's impact on media practices and emphasise the importance of combined strategies for optimal outcomes.

4.2. Ethical, Social, and Regulatory Challenges

The publication by Aissani et al. [28] examines the advantages and risks of using AI in media, particularly issues of algorithm transparency, news credibility, and accountability for errors in automated systems. The authors' conclusions partially align with the current results, as Aissani et al. emphasised that AI integration in media may increase content production efficiency and speed, while simultaneously creating risks regarding information credibility and necessitating human control.

In turn, the research by Nguyen & Hekman [29] analysed how media shape discursive frameworks around AI. The authors showed that news coverage often either overestimates the automation capabilities of AI or, conversely, focuses on the risks of losing journalistic authenticity. Both studies point to the dual nature of AI's impact: on one hand, technologies may enhance productivity and content production speed, and on the other – they create risks for the credibility, ethics, and authenticity of journalism. Thus, both Nguyen & Hekman, and the conducted study, emphasise the necessity of combining technological solutions with human oversight to ensure a balance between efficiency and the quality of the media product.

The article by Dhiman [30] also addresses the question of the dual nature of AI in journalism – a "blessing or a threat". The author concluded that the effectiveness of technologies depends on ethical regulation and user literacy. The obtained results confirmed this view: automation may improve content quality and production speed, but without human editorial verification leads to the risk of losing context and credibility. The work by Raman et al. [31] explored the role of generative AI in combating fake news and strengthening information security. The present study highlighted the potential role of AI systems for content verification while simultaneously emphasising the risks associated with algorithmic governance and automated moderation. However, while the authors' approach is oriented towards social responsibility and political resilience, the current analysis is more focused on the internal logic of systems and their structural functioning.

Dandurand et al. [32] additionally highlighted the tendency of traditional media to frame AI as a technocratic and socially disruptive force, which further reflects the ambivalent perception of automation in journalism. In comparison with the obtained results, this work demonstrated a more critical social perspective, whereas the conducted study concentrates on the internal processes of content automation.

The work by Trattner et al. [33] identifies the key directions for the responsible use of media technologies and AI, including the issues of algorithmic transparency, ethics, and explainability. The authors emphasised that without a system of control and verification, even the most accurate models can reproduce biases or misinformation. The findings of the present study are broadly consistent with these conclusions, as it also revealed the risks of algorithmic content distortion, particularly at the personalisation stages. At the same time, the structural-functional model proposed in the current work made it possible to isolate the mechanisms for compensating these risks through a combination of technocratic and socio-digital approaches.

4.3. Contribution to Existing Literature

The analysis confirmed the contextual dependence of AI integration strategies and the relevance of hybrid models combining technocratic and socio-digital approaches to multimedia content automation. The discrepancies in the conclusions between the works are primarily due to different levels of analysis (technical-functional vs. socio-communicative), types of platforms, and the specificity of the evaluated metrics (accuracy, personalisation, content production speed). The study contributes to the existing theoretical framework by integrating various approaches into a generalised model for assessing the effectiveness of multimedia content production processes, which lays the groundwork for further experiments in automation and predicting the impact of AI in journalism.

Thus, the study contributes to current discussions on AI journalism by demonstrating that effective AI integration depends not only on technological innovation, but also on editorial accountability, regulatory oversight, and audience-oriented communication strategies.

4.4. Limitations of the Study

The study has several limitations. First, the analysis relied exclusively on secondary data and publicly available information sources without incorporating primary empirical materials such as interviews, surveys, or proprietary platform analytics. Second, the lack of direct access to recommendation algorithms and internal moderation systems limited the possibility of examining the "black-box" mechanisms of AI-driven content distribution in greater depth. Finally, the study focused specifically on leading Chinese multimedia platforms; therefore, the findings may not be fully generalisable to other national media ecosystems. Future research may incorporate empirical audience studies, discourse analysis, platform-based content analysis, journalist interviews, and other audience-oriented empirical approaches to examine the practical effects and professional perceptions of AI integration in journalism more comprehensively.

4.5. Practical Implications

The findings of this study have practical implications for multiple stakeholders involved in AI-driven multimedia journalism. For media platforms, the results highlight the importance of balancing algorithmic efficiency with transparent moderation and editorial accountability mechanisms. For journalists and editors, the study emphasises the necessity of maintaining human oversight in AI-assisted content generation, particularly in politically sensitive

and high-visibility news contexts. The highlight the importance of improving algorithmic transparency, reducing biases in recommendation systems, and integrating ethical safeguards into multimedia automation processes. Additionally, regulatory institutions may use these findings to develop more balanced frameworks for AI governance that simultaneously support technological innovation, information reliability, and media ethics.

5. Conclusions

The findings of the study indicate that multimedia news may be classified by format (textual, visual, audio, interactive), distribution channel (traditional, digital, hybrid) and level of automation (classical, semi-automated, fully automated). The level of AI intervention depends on the format and channel: textual and audio materials are mostly semi-automated, while visual and interactive content demonstrates a high level of automation; traditional media employ minimal AI, whereas digital and hybrid platforms utilise medium or high levels. The integration of AI in journalism is implemented through three approaches: technocratic (process optimisation and content standardisation), socio-digital (personalisation, audience analytics, interactivity), and hybrid, which combines efficiency and personalisation, ensuring a balance between automation and editorial control. Key AI technologies include NLP for text generation and sentiment analysis, generative models for creating textual, visual, and video content, computer vision for object recognition, editing, and authenticity verification, as well as automated editing for post-production, colour correction, and voice synthesis. The systemic integration of these technologies supports the production of highly automated multimedia content adapted to audience needs.

The analysis showed that China's digital media environment is characterised by a high degree of integration of state regulation and corporate strategies, reflecting an ongoing balance between control and innovation. Chinese multimedia platforms, such as Tencent News, Toutiao, Xinhua Net, and ByteDance, increasingly integrate AI across multiple stages of content production – from automated text and video creation to personalisation and interactivity, including AR/VR. Technologies encompass NLP, computer vision, generative models, and AI-editing, which may reduce material preparation time while supporting content adaptation and automation. The systemic interaction of state and corporate strategies provides a comprehensive approach to media digitisation, where AI serves as a key tool for process optimisation, efficiency enhancement, and user engagement.

Simultaneously, the integration of AI into multimedia content production in China increasingly reshapes journalistic practices, combining automation with human editing to support accuracy and publication speed. NLP and generative models support the processing of large information flows and the generation of textual news materials and digests. Computer vision systems, AI-assisted editing tools, and AR/VR technologies additionally support the creation of audiovisual and interactive multimedia content. The level of automation depends on the content type: textual and audio are predominantly semi-automated and require editorial control, whereas video and interactive formats demonstrate a trend towards full automation, which may accelerate production and contribute to audience engagement. Personalisation and recommendation systems analyse user behaviour, forming personalised news feeds and shaping user interaction with content, while the combination of AI and editorial control may help reduce the risks of information distortion. Platforms demonstrate different AI integration strategies: Tencent News focuses on efficiency and style standardisation, ByteDance – on personalisation and interactivity, Xinhua Net – on credibility and quality control. Overall, the integration of AI into Chinese multimedia reflects an ongoing systemic transformation of multimedia production processes, increases production speed, ensures content adaptation to the audience, and strengthens user interaction with media platforms.

The integration of AI into multimedia content production on Chinese platforms may enhance the efficiency, speed, and personalisation of journalistic processes. NLP, generative models, computer vision, and automated editing allow for reducing material preparation time, standardising publication style, and scaling content production. At the same time, the use of AI generates ethical, social, and security risks: algorithmic biases, content generation errors, the formation of "filter bubbles", potential information manipulation, and censorship. An effective strategy is a hybrid approach that combines automation with human oversight and editorial control, ensuring a balance between productivity, quality, and ethical standards. Such a systemic approach may support the more responsible integration of AI, increasing audience engagement and the competitiveness of media platforms.

Over the next five years, the role of AI in multimedia journalism is likely to expand from supportive automation toward increasingly autonomous and predictive content ecosystems. The findings of this study suggest that Chinese media platforms are likely to continue integrating generative AI, recommendation systems, immersive AR/VR formats, and automated moderation technologies into newsroom workflows and audience management strategies. At the same time, the growing complexity of AI-driven journalism will likely intensify debates surrounding algorithmic transparency, editorial accountability, synthetic media, and the balance between technological innovation and regulatory governance. In this context, hybrid models combining automated systems with human oversight may become the dominant framework for maintaining both media efficiency and professional journalistic standards.

The study is limited by its reliance on secondary sources and publicly available platform materials without direct empirical investigation of journalists or audiences. Future research may expand the empirical dimension of AI-driven journalism studies by examining user perception, newsroom practices, algorithmic governance, and the ethical implications of AI-assisted content moderation.

Conflicts of Interest

The authors declare no conflict of interest.

REFERENCES

1. G. S. Sultanbayeva, E. O. Turdubaeva, O. P. Lozhnikova, and G. A. Tastemirova, *Platformization of cross-border investigative journalism in Central Asia*, Herald of Journalism, vol. 68, no. 2, pp. 72–81, 2023.
2. P. Xie, S. Nazmi Sannusi, K. S. Nie, B. D. Alexandrovich, and A. Elvira Dzhumabekovna, *Application of artificial intelligence in sports news dissemination of the Paris Olympic Games*, Testing, Psychometrics, Methodology in Applied Psychology, vol. 32, no. 2, pp. 392–408, 2025.
3. Y. Zhou, W. Liu, Y. Wu, S. Apaeva, and B. Ibraimova, *An innovative application of integrating transmedia storytelling and digital technologies into local culture in China*, International Journal on Culture History and Religion, vol. 7, no. I1, pp. 915–940, 2025.
4. M.-F. De-Lima-Santos, and R. Salaverría, *From data journalism to artificial intelligence: Challenges faced by La Nación in implementing computer vision in news reporting*, Key Word, vol. 24, no. 3, p. e2437, 2021.
5. Y. Xi, and R. A. Latif, *Reconstruction of news production driven by artificial intelligence in China*, Journal of Media and Communication Research, vol. 14, no. 2, pp. 29–45, 2022.
6. X. Wang, C. Liu, and Y. Qi, *Research on new media content production based on artificial intelligence technology*, Journal of Physics: Conference Series, vol. 1757, no. 1, p. 012062, 2021.
7. L. Shi, and M. Selvaraj Bexci, *The use and impact of artificial intelligence (AI) in news media production in Guangdong Province, China*, Prestieesci Research Review, vol. 2, no. 1, pp. 948–958, 2025.
8. Y. Wang, *The application of artificial intelligence in Chinese news media*, in 2021 2nd International Conference on Artificial Intelligence and Information Systems, Association for Computing Machinery, New York, pp. 1–4, 2021.
9. M. Jaakkola, *Patterns of storytelling about artificial intelligence in Reporting on Artificial Intelligence: A Handbook for Journalism Educators*, United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris, pp. 81–93, 2023.
10. P. R. Brewer, J. Bingaman, A. Paintsil, D. C. Wilson, and W. Dawson, *Media use, interpersonal communication, and attitudes toward artificial intelligence*, Science Communication, vol. 44, no. 5, pp. 559–592, 2022.
11. V. Papanagnou, *Who is a good journalist? Evaluations of journalistic worth in the era of social media*, Journalism, vol. 24, no. 5, pp. 1052–1068, 2021.
12. M. H. Al-Tai, B. M. Nema, and A. Al-Sherbaz, *Deep learning for fake news detection: Literature review*, Al-Mustansiriyah Journal of Science, vol. 34, no. 2, pp. 70–81, 2023.
13. N. B. Bendida, N. M. Benfetta, N. A. Mohamed, N. R. Noureddine, and N. K. Khalfallah, *Applications of artificial intelligence in the field of media in light of communication theories*, International Journal of Innovative Technologies in Social Science, vol. 2, no. 46, 2025.
14. X. Xin, *How are news agencies coping with digital disruption in the age of artificial intelligence (AI)? The case of Xinhua*, in The Palgrave Handbook of Global Digital Journalism, edited by B. Mutsvairo and K. Skare Orgeret, Springer, Cham, pp. 181–194, 2024.
15. Y. Lan, and S. Liu, *The innovative application of big data in Chinese media industry*, in Proceedings of the 2023 3rd International Conference on Big Data, Artificial Intelligence and Risk Management, Association for Computing Machinery, New York, pp. 1043–1048, 2023.
16. G. Gao, X. Lin, and K. Tang, *Analysis of the application of artificial intelligence in China's media industry based on the case studies*, in AI in Media, Communication, and Marketing: Economic, Social, and Legal Perspectives, edited by C. Vaih-Baur, V. Mathauer, E.-I. von Gamm, and D. Pietzcke, Springer, Wiesbaden, pp. 255–275, 2025.
17. L. Willnat, S. Tang, and J. A. Martin, *Digital media and politics in China*, in Routledge Handbook of Chinese Media, edited by M.-Y. T. Rawnsley, Y. Ma, and G. D. Rawnsley, Routledge, London, pp. 191–211, 2025.

18. D. Xiang, and W. Cai, *Information and communication technologies and China's international communication to the world*, Teknokultura: Journal of Digital Culture and Social Movements, vol. 20, pp. 5–14, 2023.
19. S. Valle, Y. Wang, and D. Lian, *A vision from China on artificial intelligence. Implications for soft power in global cultural exchange*, UNISCI Journal, no. 67, 2025.
20. J. Xu, and T. Flew, *Governing the algorithmic distribution of news in China: The case of Jinri Toutiao*, in The Algorithmic Distribution of News: Policy Responses, Springer, Cham, pp. 27–47, 2022.
21. L. Liu, W. Zhang, and C. Han, *A survey for the application of blockchain technology in the media*, Peer-to-Peer Networking and Applications, vol. 14, pp. 3143–3165, 2021.
22. J. V. Pavlik, *Collaborating with ChatGPT: Considering the implications of generative artificial intelligence for journalism and media education*, Journalism & Mass Communication Educator, vol. 78, no. 1, pp. 84–93, 2023.
23. Y. Li, *Research on the application of artificial intelligence technology in the field of news communication*, Master's thesis, Sumy State University, Sumy, 2025.
24. M. Abdulmajeed, and N. Fahmy, *Meta-analysis of AI research in journalism: Challenges, opportunities and future research agenda for Arab journalism*, in European, Asian, Middle Eastern, North African Conference on Management & Information Systems, Springer, Cham, pp. 213–225, 2022.
25. N. Chetouani, *Exploring changing practices and influence of artificial intelligence on modern journalism*, DIROSAT Journal of Education Social Sciences & Humanities, vol. 2, no. 4, pp. 329–341, 2024.
26. L. Li, *AI for content generation: Automating journalism, art, and media production*, SSRN Electronic Journal [Preprint], 2025.
27. A. Hassan, and A. Albayari, *The usage of artificial intelligence in journalism*, in Future of Organizations and Work After the 4th Industrial Revolution: The Role of Artificial Intelligence, Big Data, Automation, and Robotics, edited by H. Allam, A. Harraf, P. Arora, B. Alareeni, and R. K. Hamdan, Springer, Cham, pp. 175–197, 2022.
28. R. Aissani, R. A.-Q. Abdallah, S. Taha, and M. N. Al Adwan, *Artificial intelligence tools in media and journalism: Roles and concerns*, in 2023 International Conference on Multimedia Computing, Networking and Applications (MCNA), IEEE, Valencia, pp. 19–26, 2023.
29. D. Nguyen, and E. Hekman, *The news framing of artificial intelligence: A critical exploration of how media discourses make sense of automation*, AI & Society, vol. 39, no. 2, pp. 437–451, 2022.
30. B. Dhiman, *Does Artificial Intelligence help Journalists: A Boon or Bane?*, TechRxiv [Preprint], 2023.
31. R. Raman, V. K. Nair, P. Nedungadi, A. K. Sahu, R. Kowalski, S. Ramanathan, and K. Achuthan, *Fake news research trends, linkages to generative artificial intelligence and sustainable development goals*, Heliyon, vol. 10, no. 3, p. e24727, 2024.
32. G. Dandurand, F. McKelvey, and J. Roberge, *Freezing out: Legacy media's shaping of AI as a cold controversy*, Big Data & Society, vol. 10, no. 2, 2023.
33. C. Trattner, D. Jannach, E. Motta, I. C. Meijer, N. Diakopoulos, M. Elahi, A. L. Opdahl, B. Tessem, N. Borch, M. Fjeld, L. Øvrelid, K. De Smedt, and H. Moe, *Responsible media technology and AI: Challenges and research directions*, AI and Ethics, vol. 2, pp. 585–594, 2021.