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AI-Driven Creativity in New Media: A Systematic Literature Review on Automated Content Generation and Personalization

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ABSTRACT

Artificial intelligence (AI) is rapidly changing the face of modern media by automating content generation and personalization, redefining the creative sectors. However, the increasing incorporation of AI poses important problems about authenticity, ethical boundaries, and human creative agency. This paper seeks to do a thorough analysis of the current research landscape on AI applications in media in order to gain a better understanding of their creative, adaptive, and ethical consequences. Using the PRISMA approach, 30 relevant articles were chosen from an initial pool of 70 obtained from the Scopus and JSTOR databases. The review identifies three important themes: (1) AI-Generated Content and Creative Automation, emphasizing how Natural Language Processing (NLP), Generative Adversarial Network (GANs), and deep learning facilitate automated storytelling, text generation, and digital art production; (2) Personalization and Adaptive Media, which investigates how AI tools such as recommendation systems and sentiment analysis tailor content to individual preferences, enhancing engagement while raising concerns about data privacy and algorithmic control; and (3) Ethical and Societal Implications, i The findings show that, while AI improves media efficiency and user interaction, serious questions remain about originality, ethical governance, and collaborative creation. This study adds to the ongoing discussion by providing vital insights for content producers, media professionals, and regulators to help guide the appropriate use of AI in creative practice.

1. Introduction

The use of artificial intelligence (AI) into new media has altered the way digital material is produced, delivered, and consumed. AI-powered technologies, such as natural language processing (NLP), machine learning (ML), and generative adversarial networks (GANs), have opened up new opportunities for content automation, adaptive media, and personalized user experiences [1]. These improvements enable the rapid generation of text, images, audio, and video information, which has a huge impact on businesses including journalism, advertising, filmmaking, and digital art. AI has expedited creative workflows, improved audience engagement, and created new opportunities for

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interactive storytelling. However, the growing reliance on AI-powered creation poses serious questions about authenticity, originality, ethics, and the role of human artists in the creative process [2].

The adoption of AI in automated content development has grown in recent years, with AI-generated literature, music, and visual art becoming indistinguishable from human-created content. OpenAI's GPT-4, Google's Bard, and DeepMind's AlphaCode are examples of AI-powered tools with impressive natural language processing and creative writing capabilities. AI models in visual arts, such as DALL·E, MidJourney, and Stable Diffusion, may generate high-quality images from textual descriptions [3, 4]. AI-powered technologies help music and video producers compose songs, edit videos, and create immersive experiences [5, 6]. While these advancements broaden the range of creative possibilities, they also call into question traditional concepts of authorship, ownership, and artistic expression. Scholars, media professionals, and legislators continue to discuss questions about intellectual property rights and the potential devaluation of human innovation.

In parallel, AI-powered personalization has substantially altered user interaction with digital media. Platforms such as Netflix, Spotify, YouTube, and TikTok use AI-powered recommendation systems to select content based on user behavior and tastes [7,[8]. By processing massive volumes of data, AI improves user experiences by providing personalized suggestions, ads, and interactive storytelling. However, such methods raise ethical questions about data privacy, algorithmic bias, and the reinforcing of filter bubbles. AI-driven personalization raises crucial considerations about the impact of algorithmic decision-making on media consumption, as well as whether such systems contribute to information echo chambers and societal polarization.

The increasing role of AI in creative automation and media personalization needs a thorough awareness of its consequences, opportunities, and limitations. While AI has enabled new modes of narrative and audience involvement, its ethical and societal implications must be carefully considered. The growing use of AI in news reporting, automated journalism, and social media content generation has raised worries about misinformation, fake news, and the erosion of journalistic integrity. Furthermore, human-AI collaboration in creative processes raises basic problems about whether AI is actually creative or simply copies established patterns of human expression [9].

Given these complications, this research conducts a systematic literature review (SLR) to investigate the role of AI in new media, with a focus on automated content creation and customisation. This study synthesizes literature from Scopus (45) and JSTOR (25), identifying major themes, trends, and issues in the field before reducing the selection to 30 highly relevant papers using the PRISMA approach. This paper seeks to provide a complete examination of the impact of AI-driven creativity on new media, highlighting three major themes:

1. AI-Generated Content and Creative Automation - The use of AI in content creation, such as automated journalism, AI-generated art, and deep learning-based video editing, has opened up new creative possibilities while also raising questions about authenticity and artistic uniqueness.

2. Personalization and Adaptive Media - Artificial intelligence improves user engagement through tailored recommendations and adaptive storytelling, but it also raises concerns about data privacy, algorithmic bias, and human autonomy.

3. Ethical and societal implications of AI-driven media. As AI rapidly influences media creation and consumption, challenges such as misinformation, bias in AI algorithms, and intellectual property rights necessitate legislative frameworks to assure ethical AI implementation.

Despite the growing literature on AI applications in media, existing studies tend to focus exclusively on individual domains such as automated journalism, recommendation systems, or AI-generated art, frequently failing to integrate these advancements within a broader, integrative context. Furthermore, while ethical concerns about algorithmic bias, data privacy, and creative ownership are widely acknowledged, they are rarely examined in terms of practical media operations and societal implications. This is a significant gap in our understanding of AI's overall impact on creative output and consumption. The study's significance arises from its methodological approach to merging interdisciplinary results on content automation, personalization, and ethical issues in new media. This analysis is useful for content creators, researchers, and policymakers trying to manage the complex interplay between AI innovation and responsible media practices because it highlights broad themes and unresolved difficulties.

The incorporation of artificial intelligence (AI) into new media has significantly altered content generation, personalization, and user engagement. AI-powered technologies like as machine learning (ML), natural language processing (NLP), and generative adversarial networks (GANs) have opened up new possibilities for media automation, including AI-generated text, images, music, and movies [10, 11]. These advances have resulted in both opportunities and challenges for creative industries. While AI increases efficiency, scalability, and interactivity, it also raises questions about authenticity, artistic originality, ethical ramifications, and human-AI collaboration. As AI advances, its impact on media production and consumption warrants additional examination [12].

Existing research shows that AI is increasingly being employed in automated journalism, AI-generated art, deepfakes, and adaptive narrative. The ability of AI to mimic human creativity has spurred discussion over whether AI is actually creative or simply copies established patterns of human expression [13]. Furthermore, customization algorithms have transformed media consumption habits, allowing for hyper-personalized experiences on streaming platforms, social media, and digital advertising. However, such AI-driven content curation raises worries about data privacy, algorithmic bias, and the potential to create filter bubbles.

This literature review summarizes previous research on AI-driven creativity in new media, with an emphasis on two key areas: automated content development and media customisation. A systematic review of Scopus and JSTOR was conducted, with 33 selected studies assessed using the PRISMA methodology. The following sections go over the major topics recognized in the literature.

AI is increasingly being employed in creative automation, enabling robots to generate text, images, and videos with little human participation [14]. In journalism, AI-powered systems have been used to create news pieces, financial reports, and sports summaries. AI-powered systems, such GPT-4, Bard, and DeepMind's AlphaCode, may generate human-like prose that is coherent, contextually relevant, and stylistically adaptive. These technologies are transforming automated journalism by allowing media firms to create material at scale and speed, especially for real-time reporting [15]. However, worries about accuracy, misinformation, and ethical obligation persist because AI-generated content lacks the critical judgment and contextual understanding of human journalists.

Fig. 1. Comparison of non-enhanced (left) vs. AI-enhanced (right) images under low-light conditions (200 lux) [16]

Deep learning models like DALL·E, MidJourney, and Stable Diffusion use textual descriptions to make artwork, leading to an increase in computational innovation in the visual arts [2,17]. These technologies have spurred discussions about authorship, creative ownership, and originality, since AI-created works question traditional concepts of creativity. Some experts suggest that AI complements rather than replaces human ingenuity. Others worry of the potential loss of artistic identity if AI-generated works take over the creative world.

AI has also led to breakthroughs in video and music production. AI-powered editing tools let filmmakers automate post-production operations including color correction, scene transitions, and music synchronization [18]. AI-generated music, powered by models such as OpenAI's Jukebox, may create melodies and instrumentals that are quite similar to human-composed music. While these developments open up new creative possibilities, they also raise worries about the monetization of AI-generated work and the potential replacement of human artists.

AI's contribution to customization is mostly driven by algorithmic recommendation systems, which evaluate user behavior to personalize media experiences. Streaming companies like Netflix, Spotify, and YouTube use AI-powered recommendation engines to propose content based on user preferences [4]. Similarly, social media sites drive user engagement by curating news feeds, ads, and video suggestions. These individualized experiences increase user happiness while also contributing to challenges like data privacy violations, algorithmic prejudice, and digital echo chambers.

According to research, AI-driven personalization increases audience retention and engagement by predicting content preferences based on past data. However, detractors claim that such algorithms reinforce pre-existing biases and limit users' exposure to alternative opinion [8]. According to research, recommendation systems favor interaction over accuracy, which can lead to misinformation, radicalization, and the amplification of ideological conflicts. The impact of AI on public discourse, particularly in politically sensitive subjects, remains a source of worry.

AI-driven personalization in interactive storytelling and gaming enables dynamic storylines that respond in real time to user decisions. AI is now being used in games and virtual reality (VR) experiences to produce individualized story arcs, non-player character (NPC) interactions, and procedural world generation [4, 6]. These developments improve immersion and user agency, but

they also raise ethical concerns about data tracking, behavioural profiling, and the manipulation of user experiences[31].

The expanding use of AI in media has sparked ethical questions about intellectual property, disinformation, and the societal responsibility of AI-generated material. One key challenge is defining who owns AI-generated works—whether they should be credited to algorithm creators, people who contribute input, or the AI system itself [19]. Intellectual property laws affecting AI-generated art and media remain vague, resulting in continuous legal challenges.

Misinformation and deepfake technology present another key difficulty. AI-generated deepfakes, which modify audio and video to create realistic-looking but false representations, have been used to propagate misinformation, mimic public personalities, and manipulate digital narratives [8,20]. Researchers emphasize the importance of robust detection algorithms, AI ethical frameworks, and media literacy initiatives in mitigating the risks associated with deepfake technology.

The socioeconomic impact of AI-powered automation in creative industries is also a source of debate. While artificial intelligence increases efficiency, it also threatens traditional occupations in content development, journalism, and media production [16], 21]. Concerns regarding job displacement, the deskilling of creative professions, and the supremacy of AI-generated material over human-created art underscore the need for legislation that strike a balance between innovation and ethical labor practices. Some experts advocate for a hybrid paradigm in which AI serves as a supplement rather than a replacement for human ingenuity.

Despite tremendous advances in AI-powered media, numerous issues remain unaddressed. The long-term impacts of AI on creative expression, human-AI collaboration, and digital ethics warrant more exploration [22]. Future study should look into how regulatory frameworks may assure ethical AI implementation while respecting artistic integrity. Furthermore, research on user perceptions of AI-generated content, audience trust in AI-driven media, and the psychological impact of algorithmic personalization is critical for comprehending the societal implications of AI in new media [23, 24).

Another important area of future research is the creation of explainable AI (XAI) in media, which seeks to make AI decision-making more transparent and interpretable. By strengthening the responsibility of AI-driven recommendation systems and content generators, XAI may help address issues about bias, disinformation, and ethical AI deployment. Furthermore, interdisciplinary research spanning computer science, media studies, ethics, and law is required to develop a complete framework for responsible AI use in the creative industries [24, 25]).

The literature on AI-driven creativity in new media emphasizes AI's revolutionary potential as well as its key challenges in content development and customisation [14]. AI improves efficiency, interaction, and audience engagement, but it also poses issues of authenticity, intellectual property rights, misinformation, and ethical AI governance. The themes identified in this literature review—AI-generated content, media personalization, and ethical considerations—emphasize the importance of a balanced strategy that promotes innovation while upholding ethical responsibility and human-centered AI development. Future research must solve these challenges in order to fully realize AI's promise for altering the media landscape.

2. Methodology

2.1 Identification

In choosing several appropriate papers for this report, the systematic review process consists of three main phases. The first step is keyword recognition and the quest for linked, similar terms based on the thesaurus, dictionaries, encyclopedia, and previous studies. Accordingly, after all the relevant

keywords were decided, search strings on Scopus and JSTOR (see Table 1) database have been created. In the first step of the systematic review process, the present research work successfully retrieved 70 papers from both databases.

The identification phase involves searching for study materials relevant to the predetermined research issue. The keywords used are Artificial Intelligence, New Media, Automated Content Generation. Therefore, the first step was to detect keywords and search for similar, equivalent phrases in previous research. As a result, after determining all relevant phrases, search strings for the Scopus and JSTOR databases were created (see Table 1). Thus, during the first part of the advanced searching procedure, this study effectively obtained 70 publications from the databases.

Table 1
Search String

Criterion	Inclusion	Exclusion
Language	English	Non-English
Time line	2023 – 2025	< 2023
Literature type	Journal (Article)	Conference, Book, Review
Publication Stage	Final	In Press

2.2 Screening

Duplicated papers should be excluded during the first step of screening. The first phase omitted 70 articles, while the second phase screened 40 articles based on several inclusion-and- exclusion criteria developed by researchers. Literature (research articles) was the first criterion because it is the primary source of practical information. It also includes the exclusion from the current study of publications in the form of systematic review, review, meta-analysis, meta-synthesis, book series, books, chapters, and conference proceedings. Furthermore, the review concentrated exclusively on papers written in English. It is essential to note that the schedule was chosen for a Three-year duration (2023–2025). In all, 7 publications based on specific parameters were excluded.

Table 2
The selection criterion is searching

Criterion	**Inclusion**	**Exclusion**
Language	English	Non-English
Time line	2023 – 2025	< 2023
Literature type	Journal (Article)	Conference, Book, Review
Publication Stage	Final	In Press

For the third step, known as eligibility, a total of 40 articles have been prepared. All articles titles and key content were thoroughly reviewed at this stage to ensure that the inclusion requirements were fulfilled and fit into the present study with the current research aims. Therefore, 7 reports were omitted because they were Full text excluded, due to the out of field (n=3), Title not significantly (n=3), Abstract not related on the objective of the study (n=4) based on empirical evidence. Finally, 30 articles are available for review (see Table 3).

2.3 Data Abstraction and Analysis

One of the assessment procedures employed in this study was integrative analysis, which was used to investigate and synthesize a variety of research designs (quantitative, qualitative, and mixed methods). The competence study's purpose was to discover significant themes and subtopics. The stage of data collection was the first step in the theme's development. Figure 2 depicts how the author methodically examined a collection of 70 articles for assertions or material relevant to the current study's issues. The authors next reviewed the most recent significant papers on branding and augmented reality. The methods employed in all investigations, as well as the research findings, are being looked into. Following that, the author worked with other co-authors to build themes based on the data in Artificial Intelligence, New Media, Automated Content Generation.(Nur Safinas expert in artificial intelligent, Mohd Ekram Hashim-expert in new media, Farizal puadi in Art and design.) to determine the validity problems. The expert review phase ensures the clarity, importance and suitability of each subtheme by establishing the domain.

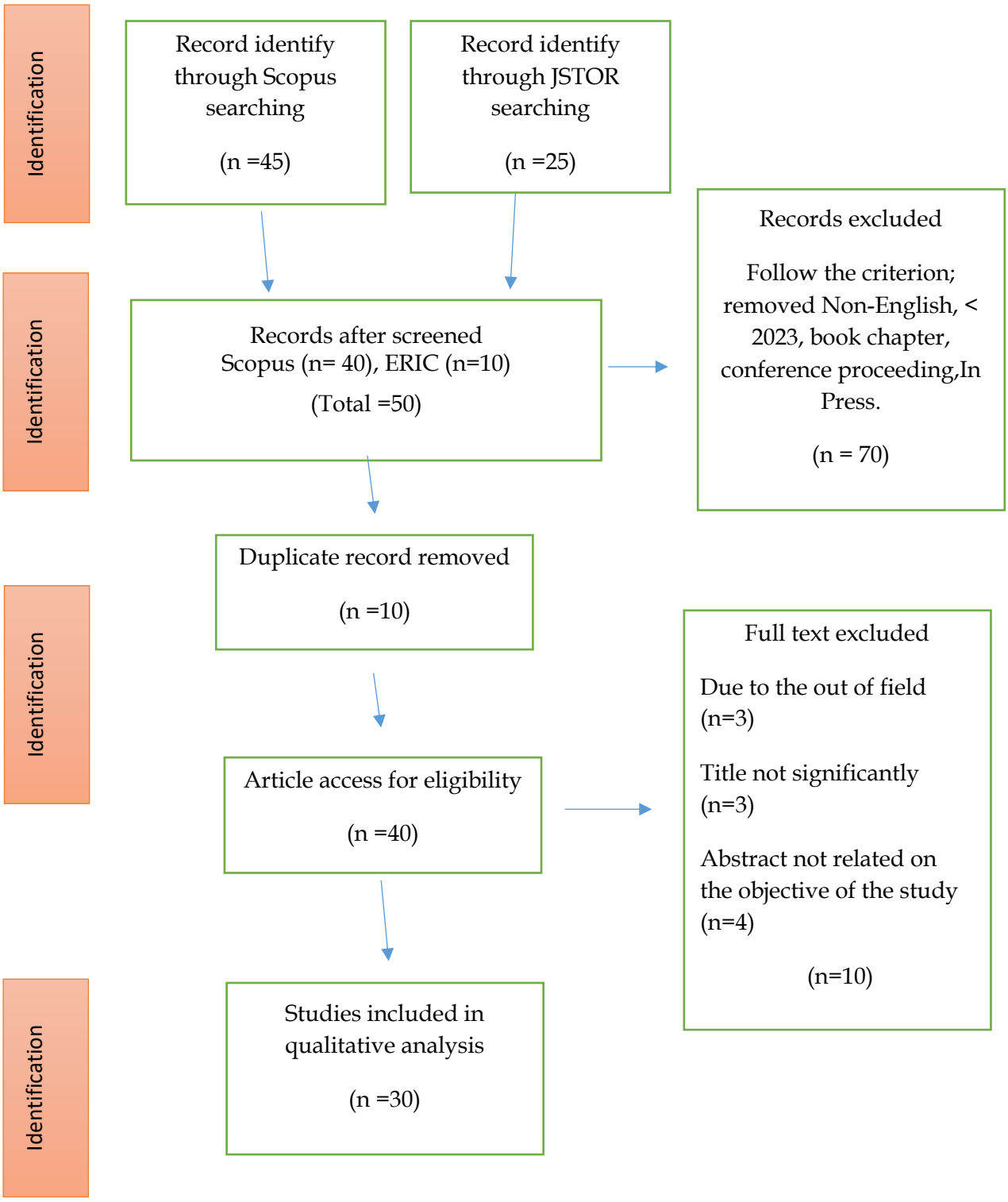

Fig. 2. Flow diagram of the proposed searching study [5]

3. Result and Finding

3.1 AI-Generated Content and Creative Automation

The advancement of artificial intelligence (AI) in creative automation has had a substantial impact on several fields, including content generation, user engagement, and educational experiences. Recent research has looked into how AI, together with developing technologies like augmented reality (AR), virtual reality (VR), and extended reality (XR), has improved digital media, automated content creation, and tailored learning. This section summarizes findings from many studies, explaining their arguments, views, and study findings on AI-driven creative automation.

Ariffin *et al.,* [25] investigated how AI improves user experience in mobile learning within the context of the Industrial Revolution 5.0. The study stresses the use of AI, augmented reality, and virtual reality to build more sophisticated and immersive digital learning experiences. According to the authors, AI has the ability to transform mobile learning by providing adaptive customisation, real-time feedback, and automated material development, hence increasing student engagement and comprehension. However, they emphasize the importance of delving deeper into usability difficulties in mobile learning, notably in balancing automation with human-centered educational design. Their bibliometric study reveals a research vacuum in meta-mobile technology methods, underlining the importance of doing additional empirical investigations on how AI-generated content effects learning practices.

Similarly, according to [26] explored the function of extended reality (XR) technologies, such as augmented reality and virtual reality, in education. The study focuses on how AI-generated content in XR environments creates immersive and accessible learning experiences for students with disabilities, including Down syndrome, ADHD, and linguistic difficulties. AI integration with XR-based learning allows for the creation of individualized and adaptable educational content to meet the needs of individual students. However, the authors warn about privacy and security concerns in AI-integrated learning settings. The study criticizes the difficulties of matching AI-generated XR content with pedagogical objectives, highlighting a potential barrier in ensuring AI automation efficiently serves educational purposes rather than operating solely as a technological advance.

Iacono *et al.,* [27] investigated the transition from metaverse-focused digital transformation to AI-powered creative automation, namely generative AI. The study identifies ChatGPT and comparable AI models as critical tools for automating content production and bridging the gap between novice and expert-level digital artists. The authors contend that prompt-based generative AI tools enable educators and content providers to create high-quality digital learning materials with minimal effort, hence democratizing content production. Their findings include a case study of an XR-based MOOC for teaching Italian that utilized AI-generated content for interactive courses, gamification, and tailored learning pathways. However, the authors also address ethical issues about AI's role in digital authorship and the monetization of creativity, claiming that over-reliance on AI-generated content may erode conventional creative and pedagogical practise.

Jain *et al.,* [1] bolster this viewpoint by examining the convergence of AR, VR, and AI across a variety of areas, including education, gaming, and healthcare. Their comparative study focuses on how AI-driven procedural content generation improves creative automation by dynamically adapting learning materials, game environments, and training simulations to user activity. The study addresses technical constraints, user acceptance, and ethical concerns, particularly in creative industries where AI-generated output may conflict with human artistic standards. One important point made is that, while AI-driven automation increases efficiency, it also raises worries about job displacement, authenticity, and the loss of human creativity in digital media.

AI-generated content is not only altering educational and creative fields, but also industrial uses. In the same way [28] investigated the impact of AI-driven creative automation on intelligent welding systems (IWS). Their research examines how AI, augmented reality, and virtual reality technologies are being utilized to replicate welding procedures, teach people, and increase industrial productivity. The authors contend that AI-generated simulations increase skill learning and safety in industrial training, lowering costs and mitigating dangers connected with real-world welding operations. This study expands the conversation on AI-driven automation beyond traditional media and education, emphasizing AI's role in industrial creativity and human-machine collaboration.

According to many research, AI-generated content can improve learning experiences by personalizing instructional materials and automating repetitive [25], [26]). However, questions about privacy, ethical responsibility, and congruence with learning outcomes persist [25-26]. AI-driven automation in metaverse and XR learning settings creates immersive and engaging experiences, but ethical issues about AI-authored content and data security are common [27, 1].

From an industry standpoint, AI-generated material is a training tool for technical education and simulation-based skill development, particularly in welding and manufacturing [28]. This shows that AI-driven automation is important not only for media and entertainment, but also for industrial innovation.

Another crucial issue is that while AI-powered creative automation might democratize content creation, it also risks undermining conventional creativity [27, 1]. The rise of generative AI technologies allows for speedier content creation and better user experiences, but researchers warn against over-reliance on AI, which may result in a decrease in human creative agency.

As state by [2] investigate how interaction design is critical in AI systems, concentrating on usability concepts and design standards to improve user experiences. Their research emphasizes the changing nature of digital interfaces, highlighting the importance of flexible and user-centered design techniques. [24] examine the integration of AI into Extended Reality (XR), emphasizing the significance of explainable AI (XAI) in ensuring transparency and trust in AI-powered systems. Both studies emphasize the importance of creating intuitive and user-friendly AI-driven interfaces that can adapt to changing user needs while remaining ethical and legally compliant.

Sharrab *et al.,*[23] investigate AI's involvement in video coding and compression, proposing the iHELP model as a solution to computational complexity in video streaming. This study complements by [29] work on AI integration in the metaverse, where AI-enhanced immersive settings necessitate efficient data processing and storage solutions. AI-powered automation in various areas enables real-time adaptation and optimization of digital information, making virtual interactions more seamless and engaging. On the other hand [8] broaden this perspective to the advertising business, where AI is altering content distribution through generative AI methods. Their research focuses on how AI-driven predictive analytics and real-time adaption improve advertising campaigns, making them more engaging and immersive.

AI-generated content is transforming a variety of industries by increasing automation, customisation, and efficiency. However, its execution raises questions about transparency, ethics, and computational problems. Like wise [2] suggest that, while AI-powered interfaces are adaptable, they also need users to constantly adjust to changing digital surroundings. This dynamic interaction, while creative, may cause cognitive overload and usability concerns if not correctly designed. Similarly, [24] underline the need of explainable AI (XAI) in boosting trust in AI-powered XR applications, confirming the premise that AI systems must be open and accountable.

On the technical side,[23] show that AI can optimize video coding by reducing file size and increasing efficiency. However, relying on AI for such jobs presents computational challenges that necessitate novel models such as iHELP to balance performance and processing demands. As

mentioned by [29] expand on this idea by considering the AI-driven metaverse, in which real-time AI processing must be efficient to enable smooth user experiences. The desire for quick, error-free, and scalable AI solutions emphasizes the importance of ongoing innovation in AI infrastructure.

AS view as [8] demonstrate how AI is eroding the distinction between traditional and interactive marketing in the advertising industry. While AI allows for hyper-personalization and immersive involvement, it also raises questions about data protection and ethical transparency. To maintain consumer trust, the challenge is to strike a balance between personalization and ethical AI methods.

Conversely [10] investigate MR remote cooperation, highlighting the function of AI in creating adaptable augmented reality (AR) instructions. Their findings emphasize the efficacy of AI-powered content automation in improving cooperation, minimizing errors, and improving user experience in industrial environments. Similarly,[30] explore the critical role of AI and wireless communication in allowing seamless and immersive metaverse experiences, highlighting AI's contributions to content personalization and real-time interaction optimization.

Dimri *et al.,*[20] elaborate on the relationship between AI and the metaverse, investigating how AI improves virtual environments through automated avatars, natural language processing, and emotion identification. Their findings are consistent with [6], who provide a multidimensional evaluation methodology for quantifying immersive and aesthetic experiences in virtual reality (VR) environments. This study emphasizes the value of AI-powered personalization in digital art and interactive storytelling.

Furthermore,[17] present a synthesis of AI's function in metaverse-based education, emphasizing its ability to improve engagement, creativity, and collaboration. The study also looks critically at issues including accessibility, ethical implications, and educational efficiency. Hashim *et al.,* [17] broaden this viewpoint by creating a synergy model for Aesthetic Experience (AX) and User Experience (UX) in augmented reality comics. Their findings indicate that AI-generated content must strike a balance between artistic and technological aspects in order to enhance user involvement.

AI-generated content and creative automation provide significant benefits across multiple disciplines, but they also introduce obstacles that must be carefully considered. Zhang *et al.*[10] contend that AI-driven MR instructions considerably improve task efficiency, but they also acknowledge the high workload and complexity involved in creating adaptive AI systems. Similarly, Montlouis *et al.* [30] emphasize the significance of real-time AI optimization in the metaverse while emphasizing the need for strong security and privacy procedures to secure user data.

Dimri *et al.*[20] investigate AI's function in metaverse applications, emphasizing its ability to tailor content and increase user immersion. They do, however, underline the ethical hazards of AI-driven automation, notably those related to data privacy and algorithmic bias. Rani *et al.*[6] complement this viewpoint by asking for a structured methodology to assess the immersive and aesthetic features of AI-generated content, ensuring that technology improvements are in line with user needs.

Hashim *et al.* [17] present a larger educational approach, claiming that AI-powered metaverse learning environments can transform traditional teaching[31]. However, they emphasize the need of accessibility and ethical issues in preventing digital disparities. Hashim *et al*. (2022) [17] contribute to this discussion by illustrating the importance of an integrated approach to AI-generated content, balancing UX and AX to produce more engaging and meaningful digital experiences.

The findings indicate that AI-generated content and creative automation have disruptive potential in the industrial, educational, and artistic realms. While AI improves productivity, collaboration, and personalization, there is still room for further research into usability, ethical problems, and user adaption. Future research should focus on improving AI-powered content automation frameworks to promote inclusion, transparency, and adaptability.

For example, Zhang *et al.* [10] describe a novel approach to MR instruction creation that could be enhanced by using AI-driven predictive modeling. Montlouis *et al.* [30] emphasize the technical facilitators of metaverse communication, but further study is needed to develop standardized protocols for seamless AI integration. Furthermore, Dimri *et al.* [20] and Rani *et al.* [6] emphasize the necessity of quantifying user experience, highlighting the need for AI-driven evaluation models capable of dynamically assessing involvement and immersion.

Hashim *et al.* [5] and Hashim *et al.* [17] offer insightful perspectives on AI's involvement in metaverse education and digital aesthetics. However, future research should look into how AI-generated content might be tailored to different learning styles and cultural contexts in order to enhance educational impact.

3.2 Personalization and Adaptive Media

The growing integration of artificial intelligence (AI), augmented reality (AR), virtual reality (VR), and other immersive technologies has had a tremendous impact on different industries, resulting in the creation of personalized and adaptive media experiences. This synthesis examines the study findings of Xu *et al.* [14], Varol *et al.* [19], and [12, 7] evaluate new trends, arguments, and difficulties in customized and adaptive media.

Xu *et al.* [14] investigate the function of smart buildings in improving user experiences via digitized wearables and immersive AR/VR apps. Their research emphasizes the use of various sensors, video streaming, AI, and edge computing to provide seamless interactions. However, one significant constraint is the discomfort produced by cumbersome AR/VR headsets, which prevents prolonged use. To address this, the authors suggest developing a lightweight panoramic image framework, an AI-powered video transcoding system, and a layered networking architecture. Their findings highlight the significance of balancing high-quality immersive experiences with hardware usability, which is a critical component of adaptive media customisation.

Similarly, Varol *et al.* [19] investigate how Industry 4.0 technologies, such as AI, cloud computing, and automation, impact the tourism industry. The report emphasizes the growing importance of digital technologies like virtual museums, augmented reality heritage tours, and 3D reconstructions in improving tailored tourism experiences. These adaptable media technologies promote increased accessibility and engagement while protecting cultural heritage. However, issues such as data privacy and the digital divide require greater investigation to enable equitable access to these advancements.

In similar vein [12] investigate the role of Web3 and AI-generated content (AIGC) in designing virtual environments for the textile and fashion industries. Their findings suggest that adaptive media in the Metaverse allows for more individualized user involvement via digital fashion try-ons, NFT issuing, and interactive brand communities. The report also identifies current issues, such as low user engagement, limited interactivity, and insufficient technical assistance. To address these restrictions, the authors propose using AI and mixed reality (MR) technology to develop immersive and culturally rich digital business centers that bridge the physical and virtual retail experiences.

On the other hand [7] offer a novel perspective by examining gender disparities in Extended Reality (XR), which includes VR, AR, and MR. They suggest that a dearth of female representation in XR development results in biased design decisions that fail to meet the needs of diverse users. Their research promotes inclusive personalization tactics such as AI-powered safety monitoring in VR environments and mentorship programs for women in technology. The findings indicate that encouraging diversity in the development of adaptable media can result in more empathic and user-centric innovations.

Venkatesan *et al.*[22] emphasize the importance of 5G technology in facilitating real-time interactivity and data transport within the metaverse. Their research underlines how 5G improves personalization by maintaining seamless connectivity, lowering latency, and increasing bandwidth, all of which are necessary for adaptive media experiences. The incorporation of 5G enables more responsive environments in which media may alter dynamically based on user behaviour, preferences, and interaction history. However, the authors note 5G's limits, particularly in terms of network densification and spectrum availability, and recommend that future study look into 6G technology for further improvements.

As highlighted by [13] take a larger approach, combining AI, IoT, and the metaverse to create intelligent and interactive surroundings. Their research reveals how AI-driven analytics, paired with IoT data, may create smart environments that adapt to user needs in real time. Personalization in this context is accomplished by data-driven insights, which enable digital media to react dynamically to user involvement. The convergence of these technologies promotes more immersive experiences in education, training, and industrial applications, emphasizing the importance of adaptive media across disciplines.

Zhu *et al.* [4] study how big language models and mixed reality technologies affect user involvement in virtual chats. Their findings suggest that various visual representations of avatars alter how users engage and remember information. Conversations in virtual reality (VR) are often regarded as taking place within the agent's area, but augmented reality (AR) settings foster a greater sense of user ownership over the engagement. Notably, human-like avatars improve user recall, implying that customization through realistic representations can boost learning and engagement in adaptive media contexts. These findings underscore the importance of developing AI-powered virtual agents that are sensitive to human cognitive and perceptual inclinations.

Herath *et al.* [11] use a meta-analytical technique to investigate the consequences of the metaverse across multiple disciplines. Their analysis of 207 studies demonstrates that AI plays an important role in improving marketing and user experience in the metaverse. The paper presents the notion of "MetaWarria," which describes potential conflicts caused by metaverse dynamics, such as security and privacy concerns. The data show that healthcare (45%) and education (22%), are the key areas benefiting from metaverse customisation, highlighting the need of adaptable media solutions adapted to varied industries.

subsequently these results reinforce customization and adaptive media's transformational potential in the metaverse. 5G technology as mentioned by [22] enables seamless interactivity; AI and IoT integration state by [13] enable smart adaptive environments; and mixed reality suggest by [4] improves user experience through avatar representation. Herath *et al.* [11] broaden these perspectives by focusing on metaverse acceptance in many fields, as well as ethical considerations. Future research should concentrate on improving adaptive processes, addressing privacy problems, and investigating next-generation networks to better tailored digital experiences.

3.3 Ethical and Societal Implications of AI-Driven Media

The ethical and sociological consequences of AI-driven media have become a significant topic as artificial intelligence (AI) is increasingly integrated into various digital and immersive contexts, particularly the Metaverse. Studies by [18] and [9] show how AI improves virtual interactions and content creation, but they also raise issues about privacy, inclusion, and the economic disparity caused by limited access to Metaverse technologies. AI-powered personalization in digital settings provides rich and engaging experiences, but it also exacerbates ethical concerns such as spying, data abuse, and algorithmic biases.

Research buy [18] investigates the Metaverse as an ecology in which AI, robotics, and immersive technologies coexist to enable human-computer interactions. The study highlights how AI-driven data analytics can improve user experiences while also emphasizing the necessity of ethical issues when managing large amounts of personal data. As AI enables avatar-to-avatar, human-to-robot, and cross-platform interactions, questions about data privacy, security, and ownership emerge as key challenges requiring legislative control. Similarly, [9] underlines the expanding involvement of AI in the gaming and entertainment industries, but warns that these developments come at the expense of ethical quandaries around user surveillance and inclusion.

As highlight by [16] look into AI's involvement in boosting user immersion in augmented reality (AR) and virtual reality (VR) scenarios using AI-driven chromatic correction systems. While increasing visual quality enhances the overall user experience, the study also raises worries about AI's ability to alter digital perceptions, potentially leading to psychological and ethical consequences. Manipulating digital landscapes with AI-powered visual upgrades may result in false expectations, reinforcing distorted realities and exacerbating challenges of digital ethics and authenticity.

Kumar *et al.* [15] provide another critical perspective, investigating AI-driven emotion recognition (ER) with quantum machine learning approaches. Their findings indicate that, while AI can improve human-computer connection by identifying emotional states via EEG data, current quantum computing models still lag standard machine learning methods. More importantly, this study highlights ethical questions about AI-based emotional profiling, specifically in terms of surveillance, privacy, and potential misuse in commercial applications.

In synthesize study, it is clear that AI-powered media in the Metaverse presents both potential and ethical quandaries. While AI improves personalization, interactivity, and immersion, its use raises concerns about privacy, security, emotional manipulation, and accessibility. Regulatory frameworks must grow alongside AI advancements to guarantee that ethical rules are followed, preventing abuse and building a more egalitarian digital ecosystem. Future research should focus on creating AI governance models that strike a balance between innovation and ethical responsibility, ensuring that AI-powered media serves humankind in an inclusive and accountable manner.

Similarly [3, 21], present a variety of perspectives on AI-driven media, with a focus on user experience, marketing, and cultural heritage preservation. In addition [3] emphasize AI's role in increasing user involvement in the Metaverse, namely through gamification in Web 3.0 marketing frameworks. In this context, AI-driven media is used to attract and retain people by providing tailored and immersive experiences. However, this poses ethical questions about data privacy, user manipulation, and the possibility of addictive digital environments that prioritize involvement over user well-being. The study concludes that AI's expanding presence in digital spaces necessitates legal frameworks to assure ethical deployment and user safety.

Murphy *et al.* [21] investigate AI's applicability in digital heritage spaces, where it enables personalized and immersive experiences using technologies such as Virtual Reality (VR), Augmented Reality (AR), and the Internet of Things. Their findings show that AI-driven recommender systems improve user engagement by personalizing material to individual interests. However, ethical issues are raised about bias and stereotyping in AI algorithms, as well as the possibility of cultural distortion. The paper proposes a human-centered manifesto that advocates for fairness, respect, and empathy in AI-driven heritage projects, highlighting the importance of responsible AI governance in conserving cultural narratives without distortion.

The findings from these research suggest that AI-driven media has transformative potential in user experience, marketing, and cultural involvement. However, ethical and cultural concerns like privacy, bias, and digital well-being must be addressed in order to ensure responsible AI deployment. Future research should concentrate on creating ethical AI frameworks that promote inclusion,

transparency, and user-centered rules while reducing the risks of AI-driven manipulation and misinformation in digital spaces.

Table 3
The theme and the key findings

Theme	Key Findings
AI-Generated Content and Creative Automation	- AI enables automated content creation using NLP, GANs, and deep learning. - AI-generated content enhances efficiency but raises concerns about originality and authorship. - AI-driven automation in journalism, visual arts, and music is transforming creative industries. - Ethical issues include plagiarism, creative agency, and the devaluation of human artistry.
Personalization and Adaptive Media	- AI-driven recommendation systems personalize media consumption based on user data. - AI improves engagement in streaming, advertising, and interactive storytelling. - Concerns about data privacy, algorithmic bias, and the reinforcement of filter bubbles. - AI enhances adaptive learning, virtual tourism, and immersive brand experiences.
Ethical and Societal Implications of AI-Driven Media	- AI-generated media can spread misinformation and manipulate user perceptions. - Intellectual property rights remain ambiguous for AI-created content. - Algorithmic bias in AI-driven media raises concerns about representation and fairness. - Ethical AI governance and transparency are necessary for responsible AI integration.

4. Discussion

The combined findings from the three themes—AI-driven creativity in new media, ethical and societal implications of AI-driven media, and AI in immersive digital experiences—showcase a complex interplay between technological breakthroughs and their broader ramifications. While AI has considerably improved content generation, personalization, and user engagement, its integration into new media brings ethical challenges that must be carefully addressed.

One of the most significant developments is AI's capacity to automate content creation across several media formats, such as text, images, music, and video. This automation has streamlined production procedures, enabling high-quality content output on a massive scale. Personalization algorithms improve media consumption by adapting content to individual preferences, which boosts user engagement and pleasure. However, these skills bring new concerns, particularly in terms of originality, intellectual property rights, and the validity of AI-generated content. The distinction between human and machine creation continues to dissolve, sparking questions about authorship and the ethical usage of AI in artistic and journalistic situations.

AI-driven media conversations continue to focus on ethical and societal ramifications. While AI improves the user experience with personalized recommendations and interactive interactions, it also introduces dangers such as data privacy, algorithmic bias, and disinformation. AI-powered systems frequently rely on massive databases, creating questions about how user data is acquired, stored, and used. Furthermore, biases in training data might produce discriminatory results, perpetuating prejudices and limiting diversity in media coverage. These concerns underline the importance of transparent AI governance and ethical frameworks that promote fairness, accountability, and user safety.

The growth of AI in immersive digital experiences, notably in the Metaverse and virtual environments, creates both benefits and challenges. AI improves engagement by enabling real-time customisation, adaptive storytelling, and gamified marketing methods, resulting in more engaging and dynamic virtual experiences. However, technical difficulties such as latency, computational demands, and accessibility constraints must be solved in order to assure fair participation. Ethical difficulties extend to digital identity and representation, as AI-generated avatars and virtual personalities raise concerns about authenticity, identity manipulation, and the psychological impact of prolonged virtual immersion.

Overall, while AI-powered media continues to transform creative sectors and user experiences, its implementation should be handled with caution. Balancing technological innovation with social responsibility is critical for creating a sustainable and inclusive digital economy. Future research should focus on bias reduction, increasing AI transparency, and developing legal frameworks that are consistent with social norms. By proactively addressing these difficulties, AI has the potential to be a tremendous tool for increasing creativity and engagement while maintaining ethical norms and human agency.

5. Conclusion

AI's incorporation into media and digital experiences has transformed content development, personalization, and user engagement. AI-powered automation allows for high-quality and scalable content creation, while personalization algorithms improve user experiences by adapting media consumption to individual preferences. However, these breakthroughs bring with them important ethical and cultural difficulties, such as data privacy, algorithmic bias, misinformation, and intellectual property rights. The rapid advancement of AI in immersive environments like the Metaverse exacerbates these problems, creating concerns about digital identity, equal access, and the long-term psychological implications of virtual immersion. Addressing these difficulties necessitates a balanced strategy that encourages innovation while maintaining ethical responsibility, transparency, and equity.

Future research should focus on creating strong frameworks for AI ethics and governance that prioritize fairness, accountability, and openness. More research is needed to investigate bias mitigation measures in AI-based content personalization and decision-making systems.

Furthermore, studies should look into the impact of AI-generated media on human creativity and cultural variety, to ensure that automation does not result in uniformity or a loss of artistic authenticity.

Future research in the field of immersive digital experiences should focus on technological breakthroughs that improve AI-driven interactivity while reducing latency and computing expenses. There is also a need for interdisciplinary research on the psychological and social consequences of extended AI-mediated interactions in virtual environments. Furthermore, the function of AI in digital heritage and educational applications needs to be investigated further to ensure inclusivity and accessibility for a wide range of user groups.

Finally, the future of AI in media is dependent on the proper development and implementation of these technologies. By focusing on ethical considerations, interdisciplinary collaboration, and user-centered design, AI can continue to improve creativity, engagement, and digital experiences while retaining societal trust and diversity.

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