The Impending Disruption of Creative Industries by Generative AI: Opportunities, Challenges, and Research Agenda

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Highlights

- Creative industries must balance human ingenuity and collaborative efforts with generative artificial intelligence (AI).
- Generative AI accelerates creativity, streamlines workflows, and sparks innovation.
- Maintaining a human touch and authenticity presents a unique creative challenge.
- Generative AI has a transformative impact on creative industries.
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Abstract

Despite the debate on the potential effects of the adoption of generative artificial intelligence (AI) in modern societies in terms, there needs to be more clarity in the scholarly discourse and directions for the creative industries. In this editorial article, we discuss the potential impact of generative AI adoption on the creative industries and outline future research agendas. We argue that the successful adoption of generative AI in the creative industries lies in finding the delicate balance between maintaining human ingenuity and reaping the benefits of technological innovation. Unlike other industrial sectors, where AI primarily automates repetitive tasks, creative professionals can use generative AI as a collaborative tool to spark new avenues for creativity, streamline workflows, and accelerate creative processes. However, maintaining the human touch and authenticity that define the output of the creative industries remains a challenge for the industry and society. We examine these issues in the paper.

1. Introduction

Generative artificial intelligence (AI) has ushered in significant advancements across various domains, including machine learning, natural language processing, computer vision, and robotics. These technological breakthroughs are poised to exert a profound influence on diverse sectors, industries, and workplaces (Finley-Moise, 2020; Dwivedi et al., 2023a; 2024; 2023c; Kshetri et al., 2023; Richey et al., 2023; Fui-Hoon Nah et al., 2023). The current knowledge about its potential influence on different industries often neglects the industry's characteristics, organisational structures, and operational methods (Dwivedi et al., 2023a; Susarla et al., 2023; Gaur et al., 2023).

This editorial is part of an ongoing series in the *International Journal of Information Management* (IJIM) on AI and Generative AI. It advances the discussion initiated by previous editorials (Dwivedi et al., 2021, 2023a, 2023b; Kshetri et al., 2023; Rossi et al., 2024). It situates these discussions within an expanded framework, aiming to explore how generative AI influences the creative sectors. Specifically, this editorial article aims to explore and evaluate the present landscape, ignite scholarly curiosity, encourage academic inquiry into this subject, and propose potential research trajectories.

We limit the analysis to the creative industry as it is one of the key sectors where generative AI could have an imminent disruptive impact. Its unique context and ways of working make it more receptive to significant disruption and reshaping infused by generative AI (Hong et al., 2014), which could have a vast impact on economies and societies (Campbell et al., 2022; Dwivedi et al., 2023b) that demands attention (Linderoth et al., 2018). The creative industries include art, music, film, fashion, design, advertising, and IT (e.g., software, services, and computer games). Companies like OpenAI employ generative AI tools, such as GPT for music creation and StyleGAN for photorealistic images, enabling creatives to innovate their content creation methods (Larsen & Narayan, 2023). Additionally, OpenAI's research on reinforcement learning has advanced AI-powered video games and automated content curation (openai.com, 2023).

The creative industry plays a significant role in modern economies, contributing to the Gross Domestic Product (GDP) and economic growth of countries, job creation and cultural development in both developing and developed economies. For example, the creative industries contributed £109bn to the UK economy in 2021, equivalent to 5.6% of GDP (Scott, 2022). In the US, the creative industries contributed $877.8 billion to GDP in 2019, according to the US

Bureau of Economic Analysis and employed over 2.6 million in 2020, according to the US Bureau of Labour Statistics (bea.gov., 2021; bls.gov., 2021). In India, the creative industries contribute nearly 8% of the country's employment, according to the Asian Development Bank (Kukreja et al., 2022). In addition to its significant economic impact, job creation and "providing a feasible option for development", the creative industries promote innovation and contribute to societies' well-being (Grynspan, 2022). Changes, disruptions, and transformations in the creative industries will likely affect economies and societies significantly, and hence deserve research attention (Elbanna et al., 2020). These changes and disruption are mainly the case as we witnessed in 2023 writers and actors going on strike for months in one of the most extended strikes in Hollywood history over the use of AI by studios in a battle to preserve human creativity (Anguiano & Beckett, 2023; Dalton, 2023; Sankaran, 2023).

The editorial begins with an overview of existing literature on industry and technology evolution, leading to an exploration of the development, significance, and impact of generative AI on the broader context of industry (Agarwal & Braguinsky, 2015). Subsequently, we dissect the effects of generative AI on four creative industry sectors: advertising/marketing, publishing, IT (software and computer services), and design (products and graphics). Finally, we offer a roadmap for future research and practical applications within these transformative landscapes.

2. Theoretical underpinnings: Industry and technology evolution

In today's dynamic global business environment, technological advancements, industry reforms, and governmental actions continuously shape the competitive landscape (Amankwah-Amoah, 2019, 2023; Doganis, 2005; D'Aveni, 2010; You et al., 2020). It is argued that firms that embrace and leverage new technologies, such as artificial intelligence, robotics, and the Internet of Things, are better positioned to renew their business models and maintain competitiveness (Sheng et al., 2019). The advent of generative AI introduces a new dimension to this competitive landscape that has yet to be fully addressed by existing research on industry evolution, revolution, and disruption (Dwivedi et al., 2021; 2023a).

Industry evolution pertains to the gradual transformation and development observed within industries and organisations over time (Agarwal & Tripsas, 2008). This evolution can be instigated by various factors, such as technological advancements, economic shifts, and broader market changes, as Audretsch (1995) and Fui-Hoon Nah et al. (2023) noted. Moreover, industry evolution can be influenced by heightened competition, evolving consumer demands,

and the expansion of global markets, as indicated by Verhoef et al. (2021). This process not only entails the transformation of individual companies and their products or services, as highlighted by Sampat et al. (2023) and Cusumano et al. (2015) but also encompasses structural and operational changes at the industry level. These changes affect key players, functions, and governance and occur gradually over an extended period. Furthermore, industry evolution involves establishing standards and regulations to ensure compliance, sustainability, and safety, as Latapí Agudelo et al. (2019) emphasised. It is observed that industries that undergo evolution tend to achieve greater success than those that do not, as demonstrated by the findings of Lucas and Goh (2009).

Over the past century, technological advancements have played a pivotal role in shaping industry evolution, starting from the invention of the telephone and the advent of computers, as discussed by Agarwal and Tripsas (2008). This technological evolution has grown increasingly intricate and sophisticated, continually enhancing communication, entertainment, and productivity, as highlighted by Shan et al. (2023). While industry evolution is a slow, continuous process of gradual adoption and change as a reaction to evolving technologies, revolution presents fast-paced shifts as a proactive response to significant technological changes. Industry revolution is a rapid transformation and discontinuous change that envisions opportunities of emerging technology and utilises them in a fast-paced process of adoption, reforming, reorganising and reshaping incumbents' structure, processes, the landscape of competition and ways of working. In the IT adoption domain, these major transformations are possible, and its extreme case is what is known as digital leapfrogging (Encaoua & Ulph, 2005).

Digital technologies have revolutionised the media, retail, and automotive industries and automation, robotics, and 3D printing have challenged traditional manufacturing (Agarwal et al., 2002). Adherence to specific regulatory and safety standards remains fundamental for industries to maintain their competitive edge. These standards encompass a spectrum of factors, ranging from minimum wage prerequisites to environmental regulations and product safety guidelines (Ozalp et al., 2023). The ongoing digital revolution, characterised by rapid technological advancements, has set the stage for innovative collaboration among companies, organisations, and governments of all sizes. The objective is to spearhead the development of fresh products and services that serve the interests of both customers and society (Santos et al., 2018). However, as industries navigate the dynamic digital landscape, they must craft strategies encompassing cost management, adaptability to emerging technologies, and the preservation of competitiveness within an evolving market. Research indicates that innovation serves as a

driving force behind this ongoing industry transformation (Malerba & Orsenigo, 1997). This transformative process is further catalysed by liberalisation and deregulation, fostering an environment conducive to the entry of new market players (Doganis, 2005). In numerous sectors, these fresh entrants have ushered in novel technologies, innovative methodologies, and distinctive business models (Agarwal & colleagues, 2002).

It is essential to underscore that technology is not merely about inventing new tools but about leveraging them effectively. Novel technologies have the potential to create sustainable solutions, improve healthcare, enhance education (Caviggioli et al., 2023; Hunter & Orr, 2023) and bridge the digital divide (Ghildiyal et al., 2023; Sharma et al, 2022). Furthermore, technology plays an increasingly central role in individuals' lives and the broader world. Businesses embrace robotics, automation, and big data in the workplace to streamline processes and amplify productivity (Tu et al., 2023). Figure 1 depicts the various internal and external drivers influencing the evolution of industry and technology. It outlines external drivers, including competitive pressure, technological advancements, regulatory requirements and compliance and internal drivers, such as innovation, R&D investments, cost pressures, and efficiency. The synergy between these drivers has resulted in transformative processes, such as shifts in industry dynamics, establishing more efficient processes, and adopting new technologies. These processes involve active engagement with the industry, reflecting dynamic features in both technology evolution and industry dynamics.
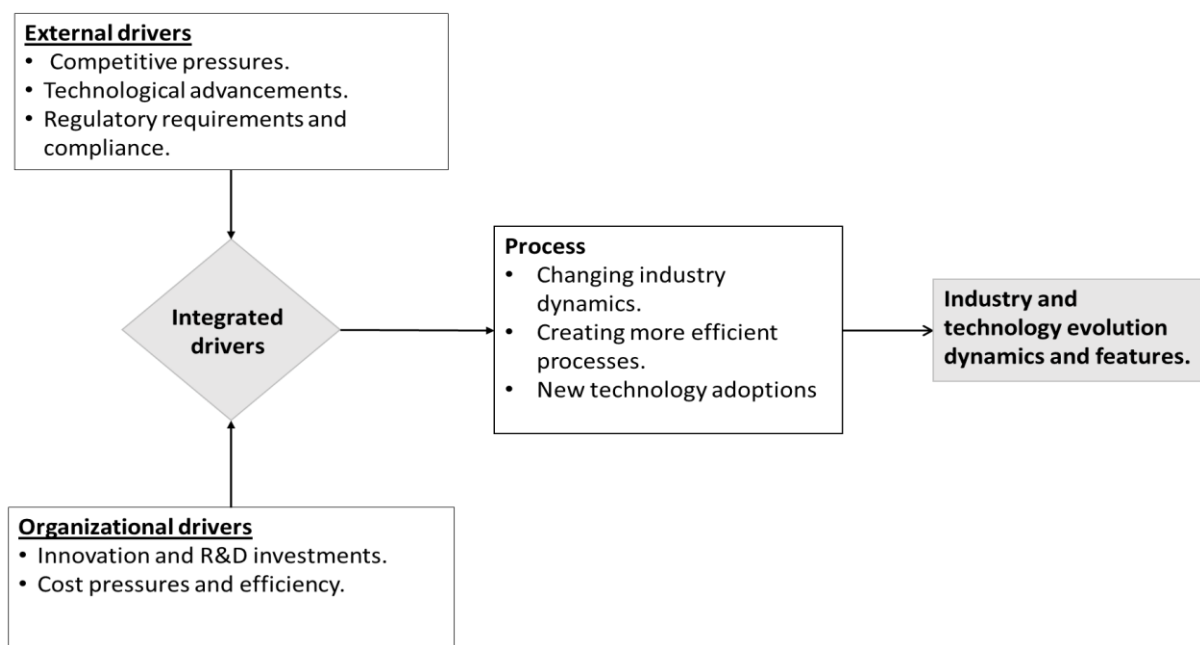

Figure 1: An integrated driver of industry and technology evolution.

3. Generative AI and the evolution of the Creative industries

The creative industries, including advertising/marketing, publishing, IT (software and computer services), and design (products and graphics), are poised for significant transformation with the advent of generative AI (Anantrasirichai & Bull, 2022). This transformation is credited to the technology's ability to automate repetitive tasks, customise content to individual preferences, spur innovation, enhance operational efficiency, and promptly adapt to evolving industry trends (Eller, 2023). Generative AI acts as a catalyst, streamlining complex processes, enriching creative capabilities, and facilitating substantial cost savings. Its impact is rooted in the transformative possibilities (Tu et al., 2023); it offers these sectors, empowering professionals to increase productivity and stay ahead in dynamic and competitive (Ghildiyal et al., 2023). This section delves into the disruptive influence of generative AI across these four creative sectors, examining its implications and potential risks.

3.1. Advertising and marketing industry

The potential applications of generative AI in marketing are vast. It can automate advert copy creation, video production, and predictive analytics (Mira et al., 2022). This technology promises to create predictive models for business decisions, enabling businesses to identify new market opportunities and customise products to specific customer needs (Kim, 2023). For instance, a financial institution can leverage generative AI to analyse market data and provide tailored investment recommendations to individual clients (Buckley, 2023). At present, generative AI has already made notable advancements in content creation (Budhwar et al., 2023). Its proficiency lies in automatically generating compelling content based on user input, minimising the necessity for manual research and editing. This capability extends to creating high-quality text, images, videos, and imitations. Furthermore, generative AI can provide insights into user engagement and potential demographic information (Aljanabi et al., 2023). For instance, an e-commerce platform can leverage generative AI to automatically generate personalised product descriptions tailored to user preferences and browsing history.

However, generative AI also carries certain risks. As a relatively new technology, it may encounter occasional accuracy issues and produce illogical or nonsensical content (Dwivedi et al., 2023a; 2024). Moreover, there is a risk of bias creeping into automated processes, necessitating vigilance in ensuring unbiased inputs and outputs (Maier et al., 2020; Aydın & Karaarslan, 2022). From a technological standpoint, generative AI propels the industry into a new era. Its ability to automate tasks, employ natural language processing, and offer predictive analytics is revolutionising marketing campaigns, making them more efficient and data driven

(Haque et al., 2022). From a business perspective, traditional marketing techniques are gradually losing effectiveness, necessitating the adoption of generative AI to stay competitive. Businesses are shifting towards technologically advanced strategies like social media marketing and search engine optimisation (Ooi et al., 2023). Regarding employment, the introduction of generative AI may reduce the need for specific manual marketing tasks. Content generation and customer support roles may become automated, leading to decreased hiring for these positions (Frederick, 2022).

While generative AI has the potential to enhance customer experiences by providing automated answers and insights, it can also lead to frustration if it fails to function as expected, resulting in accuracy or responsiveness issues (Oxford Analytica, 2023). Brand managers, advertising planners, strategists, members of creative teams, producers, models, distributors, and regulators must carefully assess the potential impacts of manipulated advertising within their respective domains. Nevertheless, deepfakes and generative adversarial networks utilise sophisticated creative AI tools to produce persuasive and realistic advertising content. With the increasing prevalence of these technologies in the advertising industry, manipulated advertising brings forth substantial opportunities and threats (Campbell et al., 2022).

Generative AI is reshaping the advertising and marketing landscape, offering significant advantages while posing challenges. The industry is experiencing technological, business, and employment changes driven by generative AI, ultimately impacting marketing strategies and customer experiences. As the industry adapts to this technology, careful management is required to ensure quality, mitigate biases, and meet customer expectations.

3.2. Publishing

The publishing industry, encompassing a diverse range of activities from book and magazine production to content distribution and promotion, is experiencing a significant transformation due to the advent of generative AI (Dupps, 2023). This transformation is reshaping various aspects of the publishing industry, inviting the examination of its current applications, potential benefits, associated risks, and broader impacts (Stevens, 2023). Currently, the publishing sector integrates traditional print and digital channels, including content creation, editing, printing, distribution, and online content generation, such as articles, blogs, videos, websites, and apps (Mogaji, 2021).

Generative AI has emerged as a valuable tool for publishers. It aids in content curation, text exploration, image editing, plagiarism detection, and content customisation to engage readers

more effectively (Bugaj et al., 2023). It also facilitates a deeper understanding of the target audience, enhancing content quality and relevance and creating personalised reader experiences (Pavlik, 2023). It can enhance customer service by responding quickly to reader queries (Thorp, 2023). For example, a publishing company can employ generative AI to automate editing, reducing costs and accelerating book production. Furthermore, generative AI can detect fraud and prevent suspicious activities, safeguarding businesses from significant losses (Almansour, 2023).

However, generative AI also brings certain risks to the forefront. There is the potential for inaccuracies or low-quality content generation, which can erode the reader's trust. Security concerns may arise if sensitive customer information is exposed to ChatGPT-generated content (Aydın & Karaarslan, 2023). Moreover, the technology is relatively new and untested, leaving room for unexpected errors or service interruptions (Shen et al., 2023).

Adopting generative AI in publishing also raises legal and regulatory considerations, including privacy, data security, algorithmic bias, and intellectual property rights (Economist.com, 2023). Risks associated with data security breaches, cyber-attacks, and potential copyright infringements also loom (Simon and Schuster, Hachette Book Group). Despite these challenges, generative AI can enhance productivity and efficiency for publishing industry employees, leading to more streamlined workflows (Forbes, Fowler, 2023). it can also automate labour-intensive tasks, leading to cost savings and increased efficiency (Beeck, 2022). For instance, a publishing firm can employ generative AI to automate customer service inquiries, reducing the need for additional customer support staff. Generative AI Customers in the publishing industry increasingly embrace ChatGPT for various tasks, from automating customer service and support to data entry and providing information (Jenneboer et al., 2022).

Generative AI is reshaping the publishing industry by offering efficiencies, cost savings, and enhanced customer experiences. While it poses challenges and risks, its adoption must be addressed for publishers seeking to remain competitive and relevant in a fast-evolving digital landscape.

3.3. The IT Services (Software & Computer Services)

The IT (Software & Computer Services) sector is undergoing a significant transformation driven by generative AI. This transformation affects various aspects of the industry, including its scope of activities, current applications, potential benefits, associated risks, and broader impacts (Abdulquadri et al., 2021; Mondal & Vrana, 2023). IT services include computer

hardware and software installation, maintenance, troubleshooting, network management, website design, development, coding, and system security (Karjala, 2016).

Generative AI offers vast potential applications in the IT industry. It can automate software and application development, significantly reducing development time and costs. For example, AI-generated code can expedite software updates (Babich, 2023). While generative AI brings numerous benefits, it also introduces certain risks. It could introduce bias into algorithms and pose data security challenges (Yang et al., 2022). There is a risk of incorrect or incomplete information, leading to erroneous decisions or behaviours. Companies must use it safely and ethically, adhering to laws and regularly testing and checking its performance (Sobania et al., 2023).

Customers in the IT industry have leveraged ChatGPT to automate customer support tasks. However, they have encountered challenges, such as the technology's limitations in handling complex technical inquiries or accurately interpreting customer feedback. Integration with existing systems and databases may also pose difficulties (Cheng & Jiang, 2020). Rising demand for cybersecurity solutions drives further investment (Jain et al., 2023a; Weforum.org, 2023).

Generative AI is reshaping the IT (Software and Computer Services) industry by automating processes, enhancing customer experiences, and driving efficiency. While it presents challenges and risks, its adoption is essential for businesses seeking to remain competitive in a rapidly evolving technological landscape.

3.4. The Design (Products & Graphics)

The Design (Products & Graphics) industry encompasses a broad spectrum of services, including product design, graphic design, and branding (Kusiak & Wang, 1993). These services involve the creation of logos, packaging, brochures, websites, digital materials, banners, and signs and developing marketing campaigns (Hubka & Eder, 2012). The industry leverages various technologies, including computer-aided design (CAD) software for 3D modelling, 3D printing for physical prototypes, image editing tools, video production software, and web application tools for interactive digital experiences (Kocielnik, 2019).

Generative AI offers numerous potential applications in design. It can create 3D simulations, provide automated design recommendations, optimise manufacturing processes, enhance customer experiences with interactive elements, automate customer service tasks, predict trends, and even generate virtual avatars (Ventayen, 2023). Despite its benefits, there are risks

associated with generative AI in the design industry (Oh et al., 2019). These risks include potential errors due to miscommunication with AI, a lack of human oversight, privacy and security concerns related to sensitive data processing, and the possibility of generating faulty or low-quality designs (Aydın & Karaarslan, 2022).

Generative AI has the potential to automate many manual design processes, such as CAD design, prototyping, and customer service. This technology accelerates design creation and enables quicker customer service responses, enhancing competitiveness (Pavlik, 2023). Generative AI could change hiring practices by assessing employees based on AI standards, potentially overlooking the human aspect in the initial selection process (Maruf, 2023). Customers in the design industry benefit from Generative AI, particularly in tasks like data entry, image manipulation, and design creation. However, integrating Generative AI with existing systems and interpreting customer feedback accurately can be challenging (Rossmann et al., 2020).

Investments in traditional design services are expected to grow, with companies seeking innovative products and experiences to differentiate themselves. This includes investments in user experience research, AI-driven design tools for customised visuals, and strategies to boost customer satisfaction and loyalty (Channelcapital.io, 2023). Generative AI is transforming the Design (Products and graphics) industry by automating design processes, enhancing customer experiences, and providing opportunities for innovation. While it brings advantages, businesses must carefully consider the associated risks and challenges to effectively leverage this technology for growth and competitiveness. Table 1 below provides a consolidated view of the key aspects and their impact on each of the four industries in relation to Generative AI.

Table 1: A consolidated view of the four sectors in the creative industries and the impact of Generative AI

Aspect	Advertising & Marketing Industry	Publishing Industry	IT (Software & Computer Services) Industry	Design (Products & Graphics) Industry
Scope of Activities	Wide range of marketing activities, online and offline.	Book cover design, magazine production, digital content creation.	IT services include hardware, software, network management, etc.	Encompasses product design, graphic design, and branding.
Current Use of Technology	Digital marketing is integral; traditional tactics are still used.	Increasing use of technology for curation and content creation.	Widespread use in software development and IT management.	CAD, 3D printing, image editing, video production, web apps.

Generative AI Potential Application	Content generation, automation, predictive modelling.	Content curation, automation, and customer insights.	Automation, virtual assistants, enhanced NLP.	3D simulations, design automation, customer service, avatars.
Risk of Using Generative AI	Poor content quality, biases, inaccuracy, and potential errors.	Lack of Quality control, privacy invasion, data security, and potential errors.	Potential errors, privacy concerns, security, lack of control and compliance assurances, poor quality.	Errors, oversight, privacy, security, design quality.
Risk on Industry (Tech)	Heightened competition, shift to auto-generated activities, negative impact on human creativity.	Reduce incumbent's competitive advantages, new digitally born entrants, disruption, cost reduction, and automation.	Efficiency, productivity, automation.	Automation, enhanced competitiveness.
Impact on Industry (Business)	Improved efficiency and data-driven strategies.	Streamlined operations and cost reduction.	Streamlined operations, cost reduction, and innovation.	Accelerated design and improved customer service.
Impact on Industry (Employment)	Automation of tasks, impact on certain jobs.	Automation of tasks, impact on certain jobs.	Automation, potential changes in hiring practices.	Automation of design tasks and potential hiring changes.
Impact on Industry (Customer)	Enhanced customer insights and automated support.	Improved customer service and data-driven content.	Enhanced customer service and automation.	Enhanced customer experiences and automation.
Impact on Industry (Investment)	Shifting investments to digital media, innovation.	Increased investment in digital publishing and innovation.	Growing investment in IT services and cloud adoption.	Investments in design innovation and user experience.

4. Discussion

Drawing on prior research, this editorial identifies key trends and opportunities that can enhance operational effectiveness in the creative industries that apply across various industries (Kaplan & Haenlein, 2020). The editorial delves into the impact of Geberative AI on the creative industries. It sheds light on the benefits and risks associated with implementing such technology, including the reduced scope for human intervention (Skavronskaya et al., 2023).

The narrative of generative AI and its impact on the creative industries presents a compelling tale of transformation and contemplation. This evolving relationship is rooted in the harmonious interplay between human ingenuity and artificial intelligence, a synergy that promises innovation while beckoning us to address profound questions. Figure 2 presents a conceptual framework exploring the interaction between creative industries, consumers, and clients.

For generations, the creative industries have reveled in the distinctiveness of human creativity. Whether it is the creation of captivating advertisements, authoring thought-provoking literature, or crafting visually captivating graphics, human creativity has been the cornerstone of these endeavors. Nonetheless, the emergence of generative AI introduces a transformative force—not as a replacement for creativity but as a catalyst for collaboration. The conceptual framework recognizes the industry-facing generative AI tools that shape the production of creative works and the client-facing generative AI that is readily available for clients to use without necessarily engaging the services of creative practitioners.

Within this dynamic, the creative industries remain guardians of ideas and solutions, shaping advertising campaigns through meticulous client-agency interactions or weaving narratives in the novels readers consume. However, a delicate balance emerges as consumers seek to reconcile automation and the human touch. Creative industries now grapple with integrating generative AI to enhance efficiency while preserving the unique human touch that defines their craft. Maintaining authenticity and nurturing emotional connections in creative output becomes a critical tightrope walk (Gkinko & Elbanna, 2022).

Generative AI steps into this arena as the creative partner, capable of replicating and mimicking human creativity. It crafts content, designs, and art that closely mirror human-generated work while offering itself as an ally to human professionals. By automating repetitive tasks, suggesting novel ideas, and accelerating the creative process, generative AI empowers creative professionals to soar to new heights. It becomes a powerful tool for streamlining workflows, allowing humans to focus on elevated realms of creative thinking.

As the wheel of innovation turns, disruption becomes an inevitable companion. Traditional workflows and business models within creative industries face upheaval, yet this disruption also usher opportunities for ground-breaking products, services, and marketing strategies. Amidst this transformative landscape, a yearning for the unmistakable human touch endures, a hunger for the unique and human crafted. The creative industry's essence lies in human

creativity, innovation, and artistic expression. These industries thrive on forging connections that resonate with human emotions and preferences, an experience that generative AI, for all its capabilities, may not wholly replicate.

Adopting generative AI for specific creative tasks raises concerns about potential job displacement within these industries. The workforce must adapt, acquire new skills, and embrace evolving roles. This adaptation necessitates substantial investment in research and development, ensuring that competitiveness and innovation remain paramount. Collaboration between creative professionals and AI experts emerges as a linchpin for progress, underscoring the responsibility of the creative industries and practitioners to invest, retrain, and foster competencies that complement their creative prowess with AI's capabilities.

Beyond these industry borders, the ripple effects of generative AI in creative content extend to culture, art, and society. The concept of authorship, the definition of creativity, and the nuances of human-machine interaction are all in flux. Ethical dilemmas loom large, with questions about plagiarism, copyright, and authenticity challenging conventional norms. As consumer behaviour shifts, particularly with growing interest in generative AI, societal expectations transform, prompting introspection on whether people will discern or even care if a work of art is AI-generated. The burgeoning investment in generative AI technology adds another layer to the narrative.

Considering these distinctive dynamics, our conceptual framework presents the intricate interplay between generative AI and the creative industries. It underscores the imperative for meticulous scrutiny, particularly regarding its implications on employment, the delicate equilibrium between automation and human touch, and the far-reaching societal and cultural impact. The landscape has transformative potentials and intricate challenges, where generative AI catalyses innovation and collaboration. The future of these domains hinges upon our ability to navigate this terrain adeptly.

As the clients engage more with the client-facing generative AI, enhancing automation that is copying human creativity, the employment landscape within the creative industries faces a paradigm shift, demanding upskilling and adaptability from the workforce – with clients asking why they should use the service of a creative practitioners when AI can do the work and the creative practitioners arguing they can do a better job and requesting clients to appreciate their human creativity which AI may not be able to display. Balancing the efficiency of automation with the irreplaceable human touch is the creative industries' tightrope walk, ultimately

swinging to the side of the client and consumers who need to make the rational decision – to either automate or experience the human touch. Financial, technical, and human resources are also imperative in managing this rational decision (Mogaji, 2023).

Furthermore, as generative AI ripples across society, reshaping cultural norms and artistic conventions, it compels us to reevaluate established paradigms. A nuanced understanding of how generative AI and the creative industries evolve is paramount in the quest to harness the opportunities and confront the challenges. This insight serves as our guiding star, charting their collective future. As we journey forward, preserving the essence of creativity and human expression in creative endeavours remains our North Star, ensuring that innovation and technology enhance, rather than overshadow, the human touch in our creative tapestry. While we could say Generative AI is here to stay (Dwivedi, 2023a), it is imperative to critically reflect on how it aligns with our societal and cultural values, reflect on the ethical consideration for the stakeholders, recognise the changing consumer behaviour, noting consumers will always aspire for these innovative technological developments and perhaps a growing call for more investment in Generative AI (Ooi et al., 2023)

The suggested conceptual framework provides a lens to conceptualise the evolving relationship between generative AI and creativity on both the industry and clients' sides. It offers strategic insights for practitioners and policymakers in the creative industries domain. It prompts us to contemplate the reshaping of the creative processes, the redefinition of roles and skills, and the ethical considerations that come with this transformative wave. In doing so, it equips academic research and practitioners to navigate this dynamic landscape with foresight and adaptability, fostering a future where human creativity thrives alongside the capabilities of generative AI. The subsequent section presents research agendas for further theoretical exploration and managerial implications as we explore the impact of generative AI on the creative industries.
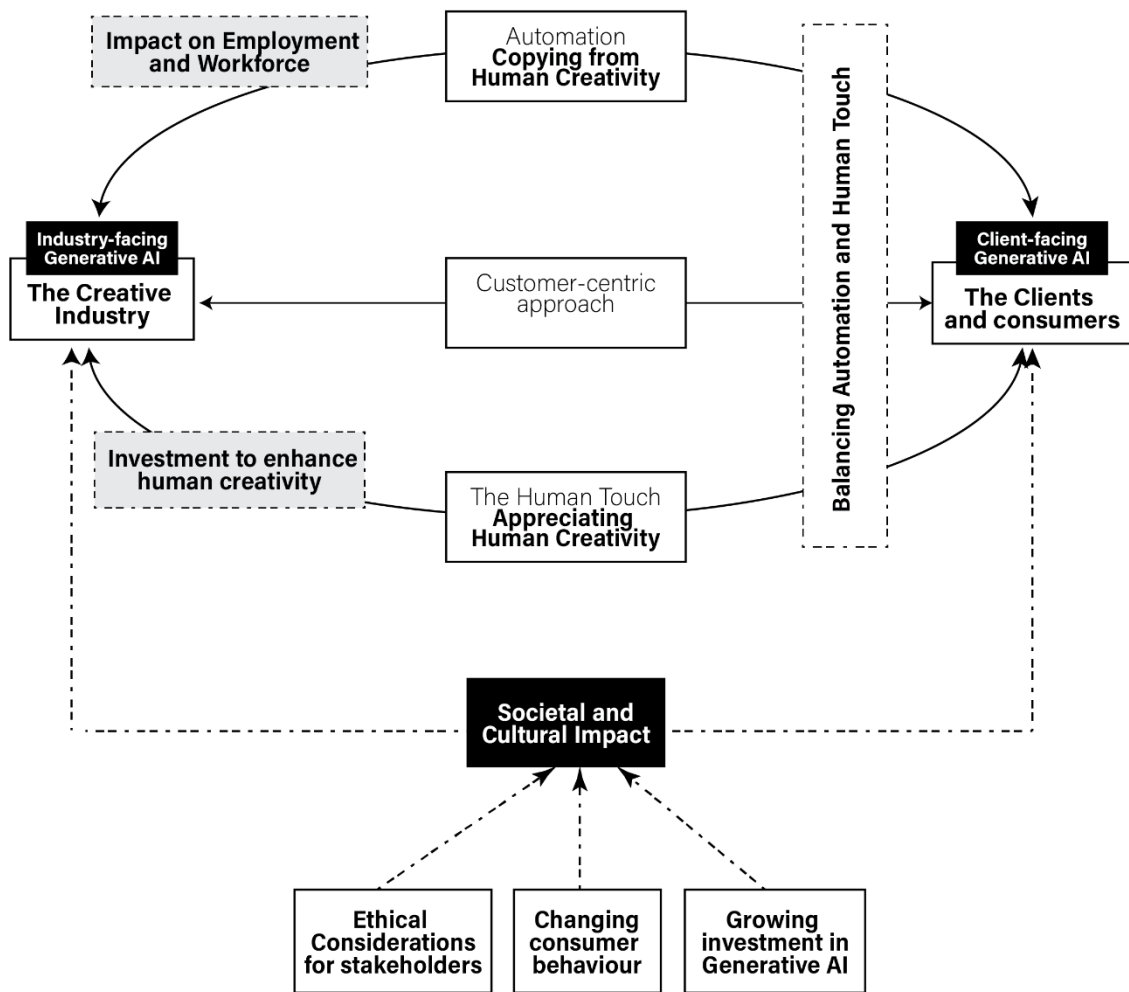
Figure 2: Conceptual Framework exploring Integration of Generative AI in the Creative industries.

5. Research Agenda

Following the previous discussion and conceptual framework, the impact of generative AI extends beyond immediate efficiency gains. In the creative industries it holds promises to transform customer experiences, change creative processes, elevate creative possibilities, and drive innovation (Mondal et al., 2023). Nevertheless, to reap these benefits, organisations must also navigate evolving regulatory landscapes, adapt their workforce, develop ethical approaches to adoption and use, and observe societal and cultural dynamics. We propose the following research agenda for future researchers to explore the impact of generative AI on the creative industries, as summarised in Table 2:

5.1. Ethical Governance of Generative AI in Creative Industries

There is a need for in-depth research to explore the ramifications of AI's generative capabilities, ascertain the parties responsible for AI design, and develop practical measures enabling creative owners and practitioners to tackle these impending ethical challenges proactively. This research agenda can be guided by questions such as: How can comprehensive ethical guidelines and standards be formulated to effectively regulate the utilisation of generative AI within the creative industries, focusing on addressing complex issues such as copyright, authenticity, and plagiarism?

5.2. Facilitating Effective Human-AI Collaboration in the Creative Industries

Given the inevitable integration of generative AI in the creative industries to amplify creative work, future research should identify various methods for fostering collaboration between creative professionals and generative AI systems. Future research should consider optimising creativity while safeguarding the genuineness of creative outputs. Key aspects to investigate include how the creative industries can harness generative AI to augment their processes without compromising their intrinsic creativity. Furthermore, the exploration should consider potential shifts in the landscape, such as the emergence of a new genre of creative work recognised as a co-creation with AI and the consequent implications for the industry and artistic expression.

5.3. Adapting the Creative Workforce to AI-Driven Transformations

Considering recent events, such as the joint strike by actors and Hollywood writers, which highlights the growing concerns over the integration of AI tools in creative production, future research should aim to comprehensively grasp the evolving roles and skillsets of creative professionals in response to the increasing automation of select tasks within the creative industries. This inquiry necessitates a deep exploration into the training and education programs essential for equipping the creative workforce with the capabilities to navigate these impending changes effectively. Additionally, the research should investigate the managerial responsibilities crucial for reassuring and preparing staff members for the forthcoming disruptions brought about by AI. Creative individuals' strategies to manage and proactively prepare for this transformation also merit examination, ensuring a holistic understanding of how the creative industries adapt to the AI-driven paradigm shift.

5.4. Consumer Perception of AI-Generated Creative Works

Given the dynamic interplay between automation and human touch in creative outputs, future research endeavours should delve into consumers' perceptions and valuation of creative works produced by AI in contrast to those crafted entirely by human hands. This inquiry should investigate how generative AI may influence consumer preferences and engagement with creative content. Do AI-generated elements significantly alter consumer demand for human-created works when financial constraints or creative briefs may influence the decision? Furthermore, understanding consumer attitudes towards generative, creative AI should encompass various artistic mediums, including physical works such as sculptures and art installations. Generative AI embodied in robots may take on a role typically associated with human craftsmanship, like painting. Gaining insights into consumers' evolving preferences will be instrumental in shaping the future landscape of the creative industries.

5.5. Generative AI's Influence on Societal and Cultural Dynamics

As generative AI continues to shape creative outputs and consumer preferences, it is paramount for future research to delve into its broader societal and cultural ramifications. This inquiry should explore how changing consumer behaviours, substantial investments in generative AI technologies, and the growing presence of AI-generated creative works may alter the fabric of society and culture. Are we at risk of losing unique cultural and creative expressions that have long been intrinsic to specific regions or communities? Will there be a re-evaluation and greater appreciation for forms of art that are inherently tied to performance and cultural heritage? Moreover, how might generative AI disrupt traditional notions of artistic authorship, cultural expression, and the preservation of cultural heritage? Could it lead to a homogenisation of creative outputs, eroding the distinctive features that define various cultures? Examining these questions critically will enable a deeper understanding of the societal and cultural transformations underway and inform strategies to safeguard and protect cultural and societal heritage in the face of AI-driven change.

5.6. Transforming Business Models in the Creative Industries

As generative AI becomes an integral part of creative processes, there is a pressing need for future research to examine its profound influence on the business models of creative industry organisations. This inquiry should delve into the strategies employed by these organisations to ensure sustainability and competitiveness in the rapidly evolving landscape. How does the integration of generative AI impact various facets of creative businesses, such as advertising agencies using AI to expedite their creative processes or film production companies employing

AI to generate personalised film covers for diverse audience segments? What are the human, financial, and technical resources required to integrate generative AI into creative business operations seamlessly? In addressing these questions, researchers can offer valuable insights into how creative enterprises can adapt, thrive, and leverage generative AI as a catalyst for innovation, efficiency, and growth while navigating the transformative landscape of the creative industries.

5.7. Balancing Innovation and Ethics in Developing Regulatory Frameworks

With generative AI poised to transform the creative industries, there is a pressing need for future research to evaluate and recommend regulatory frameworks and policies. These frameworks should effectively address generative AI's multifaceted challenges and opportunities while striking a balance between promoting innovation and upholding ethical and legal considerations. What regulatory measures can be developed to ensure responsible and ethical use of generative AI in creative contexts, such as safeguarding against copyright infringement, authenticity, and plagiarism? How can these frameworks accommodate the unique dynamics of creative industries, where human creativity is valued alongside AI-augmented processes? Furthermore, future research should examine the deployment and adoption of these regulatory frameworks, shedding light on how they can be effectively implemented to guide the ethical and equitable integration of generative AI in the creative industries. By exploring these questions, researchers can contribute to developing comprehensive regulatory strategies that foster responsible AI adoption while nurturing innovation and creativity within the dynamic landscape of the creative sector.

Table 2 encapsulates a concise overview of the research agenda dedicated to proficiently adopting generative AI within the creative industries. A meticulous examination of these research questions and agendas can deepen our comprehension of the evolving relationship between generative AI and the creative industries and furnish practitioners, policymakers, and scholars with invaluable insights. Utilizing diverse methodological approaches, such as cross-sectional studies, involves the implementation of single or multiple waves of data collection strategies (Maier et al, 2023) and this approach encompasses both quantitative and qualitative data to enhance our comprehension of AI-driven transformations (Mogaji et al, 2024). The exploration of these research questions serves as a catalyst for driving innovation, enhancing operational practices, and fostering sustainable growth within the creative industries, reflecting a broader impact on the intersection of technology and creative endeavours.

Research Area	Future research questions
Ethical Governance of Generative AI in Creative Industries	1. What are the key ethical considerations linked to utilising generative AI in creative sectors, and how do these considerations vary between different creative fields? 2. Do the current legal and regulatory structures for generative AI in creative industries adequately address ethical concerns?
Facilitating Effective Human-AI Collaboration in the Creative Industries	1. How can AI algorithms be harnessed to boost creativity and productivity within creative industries while ensuring they complement, rather than replace, human creative abilities? 2. What economic and business models underpin human-AI collaboration in the creative industries, and how does AI influence revenue, cost structures, and business strategies within these sectors?
Adapting the Creative Workforce to AI-Driven Transformations	1. How can AI-powered changes advance inclusivity and diversity in creative industries while preventing the exacerbation of existing inequalities, and what measures can be implemented to achieve this? 2. What are the roles of public and private sector entities in enabling AI-driven changes within creative industries, and how can they collaborate effectively to bolster and empower the creative workforce?

6. Practical Implications

This editorial also offers practical implications for the creative industries as they explore leveraging the potential of generative AI as follows.

6.1. Embrace AI as a Creative Partner

The creative industries stand at a crucial juncture where they must recognise the immense value of generative AI as a creative collaborator rather than merely a substitute for human creativity. Creative professionals should proactively seek partnerships with AI systems to unlock their potential fully, leveraging their capabilities to enhance and complement their work. This collaboration requires the development of well-thought-out strategies that facilitate the seamless integration of AI-driven tools into established creative processes. In a landscape where numerous industries have already embraced this transformative technology; the creative sector must stay and actively explore and embrace its possibilities. Developing comprehensive strategies for effectively integrating generative AI into existing business models is imperative. This strategy includes considering how AI can positively impact product development,

marketing strategies, and customer experiences. Crucially, allocating resources and talent should be strategic, aimed at leveraging AI technologies effectively to drive innovation and competitiveness within the creative industries. By taking these steps, the creative sector can position itself as a leader in harnessing the potential of generative AI while preserving the core elements of human creativity and ingenuity.

6.2. Invest in Training and Upskilling

Recognising AI as a creative partner, the creative industries must proactively prepare for effective and innovative collaborations with this technology. As AI reshapes job roles within creative sectors, it becomes imperative to invest in comprehensive training and upskilling programs that adequately equip the workforce for evolving positions. This responsibility extends to creative companies and their employees, such as advertising agencies and publishing firms. Implementing and exploring continuous learning opportunities becomes crucial, enabling staff to acquire the skills necessary to complement AI technologies effectively. This skill development strategy may involve the development of short courses, executive programs, and technical training initiatives to enhance versatility with these technologies.

6.3. Preserve Human Authenticity

In the quest to harness AI for enhanced efficiency and the acknowledgement of AI as a creative partner, preserving the human touch and authenticity in creative outputs remains paramount. It is crucial to ensure that AI-assisted designs continue to evoke emotional resonance with consumers. Clients and consumers seek to establish a meaningful connection with creative works, and it is the responsibility of human creators to maintain control and oversee the process. This may manifest in various ways, such as active involvement in advertisements' creative design and art direction, crafting emotionally charged poems, or infusing digital art with human emotions. Creatives should consistently strive to uphold these emotional connections, distinguishing human-made content from machine-generated outputs.

6.4. Consumer-Centric Approach

Embracing a consumer-centric approach is essential in the creative industry's response to the growing influence of AI. Recognising the diverse preferences of consumers regarding AI-generated and human-created content is paramount. To navigate this terrain effectively, the creative industries should invest in thorough market research to gauge consumer perceptions and preferences regarding AI-generated creative works. Armed with these insights, creative professionals can tailor their strategies to align with customer expectations, ensuring that each

creative endeavour is crafted to cater to the specific requirements of the brief and the preferences of their clientele.

6.5. Safeguard Cultural and Artistic Heritage

Preserving cultural and artistic heritage is a vital responsibility of the creative industries. Just as we continue to celebrate the creative works of great artists like Picasso, appreciate the timeless words of Shakespeare, and revel in the immortal music of Handel, it is essential to recognise the potential impact of generative AI on cultural and artistic expression in this digital age. Considering these advancements, the creative industries must proactively safeguard traditional notions of art, authorship, and cultural heritage. Engaging in open dialogues and collaborations with cultural institutions and policymakers is paramount. These discussions should revolve around developing strategies and policies that protect and preserve the rich legacies of art, literature, music, and cultural heritage. By actively participating in these efforts, the creative industries can ensure that the essence of human creativity and cultural expression, exemplified by the works of these great artists and countless others, remains intact and continues to be celebrated in the digital era.

6.6. Active Involvement in Regulatory Discussions

The creative industries must actively engage in regulatory discussions concerning AI technologies in line with the imperative for open dialogues and collaborations with cultural institutions and policymakers. This engagement entails close collaboration with policymakers, industry associations, and AI developers to shape regulatory frameworks proactively. While advocating for a pro-innovation stance, it is equally crucial to ensure that ethical and legal considerations are at the forefront of these discussions. Recognising the unique context of the creative industries and the specific impact of generative AI, policies and regulatory frameworks must be tailored to address these nuances effectively. By actively participating in regulatory discussions, the creative industries can contribute to developing frameworks that foster innovation and uphold ethical standards and legal requirements, ultimately creating an environment where generative AI can flourish responsibly within the creative sector.

These recommendations aim to guide creative industries in harnessing the transformative potential of generative AI while addressing challenges, preserving human authenticity, and aligning with evolving societal and regulatory landscapes.

7. Conclusion

Generative AI is a powerful ally for the creative industries, poised to fuel innovation and foster novel creative exploration. Its ability to generate new ideas is a wellspring of inspiration for creative professionals, offering fresh perspectives and acting as a catalyst for further imaginative endeavours. Moreover, the creation of synthetic training data by these AI models holds promise in training other AI systems to detect patterns, uncover solutions, and push problem-solving boundaries. This dynamic synergy between human creativity and AI ingenuity has significant potential for developing digital products and experiences with unmatched fidelity and creativity.

However, the integration of generative AI introduces an element of automation into creative processes, a facet that can alter the landscape of creative output. While the efficiency gains are evident, there is a need for a nuanced approach to balance the advantages of automation with the preservation of an authentic human touch in creative endeavours. Striking this equilibrium ensures creativity remains at the heart of the industry's output.

Adopting generative AI raises legitimate concerns, particularly in intellectual property rights and copyright adherence. The generation of content by AI models may inadvertently infringe upon copyright laws, potentially paving the way for legal disputes and complications. To mitigate these risks, it is imperative to establish robust frameworks that safeguard intellectual property rights, validate content for appropriateness and suitability, promote fair competition among creative professionals, and implement rigorous security measures to protect data integrity and privacy.

In addition, education emerges as a cornerstone of responsible generative AI adoption. Creative professionals must deeply understand this technology, enabling them to make informed decisions regarding its use. This knowledge empowers them to harness the benefits of generative AI while navigating the ethical, legal, and creative considerations that accompany it.

In conclusion, generative AI's impact on the creative industries is multifaceted, offering unprecedented opportunities for innovation while demanding careful consideration and strategic safeguards. The dynamic interplay between human creativity and AI capabilities is poised to shape the future of creative endeavours, providing fertile ground for exploration and collaboration. To realise the full potential of generative AI, the creative industries must tread

thoughtfully, preserving the essence of creativity, protecting intellectual property, and nurturing a workforce that seamlessly integrates human ingenuity with AI-driven excellence.

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