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Shifting Resource Configuration of the Creative Businesses in the Perspective of Digital Economy

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Abstract

Extant literature has identified how the digital economy has transformed the types of resources available to creative businesses, both tangible and intangible. Since previous research on the digital economy's influence over these resources is limited, yet remains pertinent in reshaping the resource configuration. By analyzing 25 articles, we identified and explored how resource allocation of the creative businesses shifts. As it is driven by the digital economy, which contributes to and shapes the overall digital economy. The findings highlight (1) types of resources in the creative businesses; (2) challenges and opportunities faced by creative businesses; (3) impact of digital economy on creative businesses' resource allocation strategies.

Keywords: Creative Industry, Creative Businesses, Digital Technologies, Resource Allocation, Digital Economy

1. Introduction

Creative industry (CI) is a dynamic industry that heavily relies on both knowledge-intensive and labor-intensive processes. CI involves cycles of creating, producing, and distributing goods and services that are anchored more in creative inputs such as creativity, skills, and intellectual capital (Indriartiningtias et al., 2019). It functions as an ecosystem that centres the innovation process of individual creativity, a dynamic and knowledge-intensive sector that plays a crucial role in driving economic growth and innovation (Bhatiasevi & Dutot, 2014; Madudová, 2017). It encompasses a wide range of businesses from large corporations to small firms (F. Li, 2020), and spans various domains, including both digital pioneers and traditional sectors that have embraced digital tools (Fachrunnisa et al., 2020). CI thrives on human creativity, cultural awareness, and interpersonal skills, making it less susceptible to automation compared to other fields (Buchoud et al., 2021; Sonobe, 2022). This human element positions the CI sector for continued growth in the digital age. This industry is selected in this paper's context for their broad coverage in both traditional and digital native sectors altogether (F. Li, 2020).

Creativity is the pillar of the CI, fuelling the generation and transformation of ideas into valuable outcomes. This creative input, combined with intellectual capital and the skills of the workforce (Indriartiningtias et al., 2019), forms the foundation for innovation within the CI. Unlike most industries, where the value chain might begin with existing materials or concepts, the CI operates through a distinct value chain centred on creative idea generation. This chain encompasses the entire life cycle of a creative product or service, starting from the conception to product

creation, production, distribution, to retail and consumption (Gohoungodji & Amara, 2022). This emphasis on human capital and intangible assets fuels the CI's unique value-creation process, which ultimately contributes to economic growth by generating economic value through creativity-driven process (Abbasi et al., 2017; Machmud & Ahman, 2019). The creative industries have emerged as a pivotal force in the global economy, driving growth, employment, and cultural vibrancy (Zhao et al., 2024).

The digital economy (DE) is the economic activities which fully integrate digital technologies to empower stakeholders to create value, requires significant resources and capabilities (Jing et al., 2023; Matarazzo et al., 2021). Digital technologies also help to promote the development of CI by improving innovation efficiency through the mediation of information asymmetry, accelerating the flow of creative elements, optimizing allocation of capital, human, and creative resources, and embedding new strength into the growth of creative businesses (Zhao et al., 2024; (Rong, 2022). On the other hand, the creative industries, with their emphasis on innovation and human capital—significantly contribute to the DE by generating new digital content, products, and services. This symbiotic relationship fuels economic growth and expands market opportunities for both creative sector and the broader digital economy by unlocking new opportunities such as increasing innovation, productivity, and connectivity (Büyüközkan & Göçer, 2018; Jordan & Richterich, 2023; Worldbank, 2023)

Recognizing the crucial role of CI in driving innovation and economic growth, stakeholders; such as national and global authorities, policymakers, and businesses; are increasingly focused on fostering its potential (Abbasi et al., 2017). Harnessing the CI's impact on innovation and economic growth necessitates strategic investments in infrastructure and employee training (Rong, 2022). Moreover, nurturing creativity within the workforce is essential, as innovation is fundamentally rooted in the skills, knowledge, and creative potential of employees (Salder, 2021). Therefore, accelerating the growth of the CI sector necessitates a combined effort that leverages the creative power of human capital and transformative potential of the digital tools and platforms that fuel the digital economy. This synergy will enable the creative businesses to reach new heights of innovation and development (Yao et al., 2023), as previous studies have paid insufficient attention to the effects and potentials that the digital economy and creative industry can bring (Zhao et al., 2024).

While the creative industry has traditionally relied on specific resources to fuel innovation and economic value creation, the emergence of the digital economy raises critical questions about the types of resources required by creative businesses. However, limited research exists on the precise ways in which the digital economy has transformed these resources needs, whether tangible or intangible (Zhao et al., 2024). This knowledge gap hinders our understanding of how creative businesses can best adapt and thrive in this evolving digital world. Therefore, this study aims to explore how the digital tools and resources available to creative businesses are changing due to the digital economy and how it contribute to and shape the overall digital landscape. Through systematic review, the purpose of this research is to identify gaps and provide valid suggestions related to the shifting configuration of resources of creative businesses in the context of digital economy. By investigating several research questions; (1) how has the Digital Economy impacted the types of resources of creative businesses? and (2) how do the creative businesses adapt their resource allocation strategies to address the challenges and opportunities associated with this shift?

This article is structured as follows. First, the article describes the literature review that includes digital economy and creative industries in the current study. Followed by the research methodology that employs PRISMA method protocol, which will be continued with the results and discussion of the overall findings. Finally, the main conclusions are also discussed in the latter section.

1.1 Digital Economy

The rise of digital economy (DE) growth on a global scale is driven by advancements in digital technologies and a shifting environment characterized by volatility, uncertainty, complexity, and ambiguity (VUCA) (Autio et al., 2018; Solomon & van Klyton, 2020). This environment necessitates business agility due to rapidly changing market conditions. Organizations must adapt their processes to effectively leverage digital technologies and navigate the market to achieve optimal efficiency. Digital transformation is the cornerstone of this circumstance,

navigates businesses to uncover new opportunities in optimizing their process, lowering costs, reducing waste, attracting more customers, increasing brand loyalty, embracing new business models, and leveraging co-creation value. Furthermore, the digital economy has become a prominent agenda for global institutions such as OECD, World Bank, World Economic Forum (Shen et al., 2022; Yusuf, 2022).

The digital economy is a term commonly used to describe a broad spectrum of economic activities driven by digital information and knowledge. It prioritizes productivity growth and optimization through the utilization of digital resources, such as data, software, and technology infrastructure (Rong, 2022; Sun et al., 2023). These resources empower businesses to facilitate value creation and customer engagement (Matarazzo et al., 2021). DE also disrupts traditional patterns across various scales, from micro to macro, promoting industrial integration and economic efficiency by creating more effective channels for information sharing, encouraging industrial innovation and economic structural transformation (Wang et al., 2023). Essentially, DE revolutionizes economic activities by altering firm's operational practices. This shift depends on the integration of digital technologies, which enables the enhancement of business processes, such as customer experience and operational streamlining (Fitzgerald et al., 2014; Liu et al., 2011). Consequently, businesses benefit from increased efficiency, reduced costs, broader market reach, job creation, and ultimately, contribute to overall economic development (Rong, 2022).

However, integrating new technologies to leverage creative businesses' resources can be a complex process that requires deliberate management and adequate resources and capabilities (Jing et al., 2023). Small and mediumsized enterprises in the digital economy face distinct challenges due to limited resources (Cao & Weerawardena, 2023) compared to larger firms. Fewer SMEs encourage their employees to acquire digital skills, in which exacerbates the digital divide (OECD, 2021). Additionally, the complexity of advanced digital tools further widens the gap between SMEs and larger firms. These resource gaps impede SMEs' digital transformation journey and reduce the likelihood of adopting new digital solutions (Rupeika-Apoga et al., 2022). Specific resource gaps encompass environmental resources, knowledge, and digital skills, financial resources, proper digital infrastructure, and trained personnel (Arbore & Ordanini, 2006; Ayinla & Adamu, 2018; Saka et al., 2022; Taylor & Murphy, 2004). Consequently, SMEs struggle to overcome obstacles such as lack of information, awareness, and affordable digital infrastructure.

1.2 Creative Industries and Creative Businesses

The Creative Industries (CI), according to the UK Department of Culture, Media, and Sports (DCMS) encompasses a diverse range of sectors that rely on individual creativity, skill, and talent to generate intellectual property and drive economic growth. This definition is widely adopted as a global standard, and identifies thirteen core sectors within the CI that comprise advertising, architecture, design, fashion, film and video, music, performing arts, and publishing (F. Li, 2020). These sectors play a crucial role in fostering innovation within an economy through several key mechanisms.

In general, CI plays three roles in contributing to the innovation potential of an economy which comprises; (1) creating and commercializing new ideas that lead to novel products and services; (2) heavily relying on and pushing the boundaries of technology, driving adaptations and advancements; (3) and offering creative services that fuel innovation across various businesses and organizations (Matiza, 2020). Therefore, economic development can be observed through the commercialization of human ideas in creative industries, where the skills and knowledge of human talent are central generating the necessary inputs for economic growth (Matiza, 2020). This emphasis on human capital underscores the critical role of human element within the CI sector. Furthermore, research suggests that CI demonstrates greater resilience compared to other industries during economic downturns and periods of turbulence. This adaptability is likely a result of the inherent flexibility and innovative capacity embedded within the CI sector (Yao et al., 2023)

The creative industry's emphasis on value creation contributes to its structural distinctiveness. Compared to other sectors, the creative industry exhibits less emphasis on replication and places greater importance on content creation (Salder, 2021). This focus on value creation is further bolstered by the industry's reliance on human

capital, where the creativity, talent, and adaptability of employees are critical components, allowing them to respond effectively to external changes and identify new trends (Fachrunnisa et al., 2020). CI is dominated by SMEs including micro-enterprises and freelancers, representing 85 percent of all actors (Worldbank, 2023). It encompasses various businesses, from large corporations to small firms (F. Li, 2020), including both digital pioneers and traditional sectors that have embraced digital tools. Notably, CI includes areas where the digital revolution is still evolving. Unlike many fields susceptible to automation, the creative industry thrives on human creativity, cultural awareness, and interpersonal skills (Buchoud et al., 2021; Sonobe, 2022), making jobs in this sector more resistant to automation and positioning the sector for growth. The combined effect of the creative industry and SMEs fosters job creation, cultural exchange, and revenue generation—all key pillars of a thriving creative economy.

Unlike traditional industries, CI prioritizes originality and adaptability. Spanning from large corporations to SMEs, the sector encompasses both digital pioneers and established players. Within the creative industry often demonstrates resilience to automation due to its human-centric nature (Buchoud et al., 2021; Sonobe, 2022). In this context, creative businesses are distinctive for their emphasis on innovation, human capital, and value creation (Fachrunnisa et al., 2020; Salder, 2021). Creative businesses are entities that prioritize added value elements stemming from new value creations. As a result, they are structurally distinctive with fewer tasks in replication which heavily relies on the diverse and specialized set of skills and knowledge that allow them to respond to external change and identifying new trends (Salder, 2021).

2. Method

2.1 Research Design

Systematic Literature Reviews (SLRs) are recognized as an effective method for systematically examining and appraising a specific body of scholarly work (Mariani et al., 2022). This study systematically reviews and identifies gaps in the literature, aiming to provide recommendations related to the resource shifting of creative businesses in the digital economy. This process involves searching through two science databases such as from Science Direct and Proquest. The systematic literature review process began by identifying relevant keywords to be used as search strings, we used Boolean logic in order to refine the search results we employ "AND" and "OR" to establish logical relationships among the keywords. To address the gap on how the digital economy has changed the types of resources needed by creative businesses, this study aims to perform a systematic review using PRISMA protocol which provide a precise mechanism to minimize researcher bias and explore the research process (Hossain et al., 2022).

2.2 Literature Search

Upon conducting various keyword combination searches across two academic databases, this study employed a three-step approach. First, core keywords encompassing the digital landscape were utilized, including "digital economy" and "resource". Second, to capture the creative sector, a range of synonyms were included, such as "creative industry", "cultural industry", and "creative businesses". This comprehensive keyword strategy aimed to ensure the retrieval of a broad and relevant selection of studies. Additionally, filters were applied to restrict results to articles published within the last seven years (2017 until 2024) to ensure the retrieval of a broad and relevant selection of studies from academic journal as the source. Followed with the selection process, from which duplicate entries were meticulously removed using reference management software such as Zotero. The remaining articles were subjected to a title and abstract screening process to identify relevant studies within the fields of business, management and accounting subject areas, and sourced from academic journals due to restrict to high-quality journals papers that are peer-reviewed. Titles and abstracts were assessed for their alignment with the research topic, specifically the impact of the digital economy on resource allocation within creative businesses. Studies deemed irrelevant or out of scope were excluded during this stage.

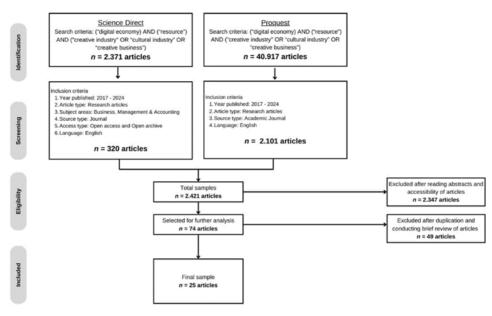


Figure 1: Article selection

To ensure a focused and relevant review, a set of pre-defined inclusion and exclusion criteria were applied to the shortlisted articles after the title and abstract screening. These articles were included by following these criteria such as (1) published between 2017 and 2024 to ensure recent and up-to-date research, (2) classified as research articles, (3) focused on the fields of business, management and accounting to maintain thematic alignment, (4) using sources from peer-reviewed academic journals, (5) available in English for facilitating accessibility and analysis. The articles that did not meet these criteria were excluded from the review. This rigorous screening process ensured that the final sample comprised high-quality research articles directly addressing the research question. After the eligibility of research paper has been identified accordingly, the research papers that are included are 25 articles.

3. Findings and Discussion

3.1 Descriptive Analysis

This section presents a descriptive analysis of the studies identified through our systematic literature review (SLR) process. Specifically, we analyze the distribution of studies by research objectives, types of resources used within creative industries, challenges and opportunities faced by creative businesses, and the impact of digital economy on creative businesses' resource allocation strategies to identify patterns in research activity. These descriptive analyses provide a foundational understanding of the current state of research on the topic and pave the way for a deeper exploration of the key themes and findings identified in the review.

Table 1: Research Key Themes			
References	Subject of Analysis	Subsector	
Fernandez-Lores et al., 2022	SMEs	Museum	
Gornostaeva, 2023	SMEs	Fashion	
Hsu et al., 2023	SMEs	Museum	
Ji et al., 2022	SMEs		
Kwon et al., 2022	SMEs		
J.Li., 2022	SMEs	Craft	
Novani et al., 2022	SMEs	Games & animation, Museum	
Raimo et al., 2022	SMEs	Museum	

Downo & Strivitorio 2021	SMEs	
Rayna & Striukova, 2021		
X. Zhang et al., 2022	SMEs	
Burnes & Choi., 2021	Individuals	Music
Fauchart et al., 2022	Individuals	Music
Jahromi & Ghazinoory., 2023	Individuals	Games & animation
Matiza, 2020	Individuals	Music, Fashion
L. Zhang et al., 2023	Individuals	Craft
Chen et al., 2022	Industry	Craft
Pang et al., 2022	Industry	Fashion
Purbasari et al., 2020	Industry	Games & animation
Wang et al., 2023	Industry	
Xi et al., 2022	Industry	Games & animation
Yao et al., 2023	Industry	
Alexandri et al., 2019	Large firms	Museum
Landoni et al., 2020	Large firms	Games & animation
Kefi et al., 2024		Museum
Imawan et al., 2023		Music

From the findings above reveal that the subject of analysis focuses on small and medium-sized enterprises (SMEs) within the creative industries, suggesting a potential research gap in understanding the challenges and opportunities. While SMEs are the primary focus, there is a need for more research on the industry level and the individual creator's perspective to gain a comprehensive understanding of the creative landscape. Followed with the research trends tend to concentrate on a few specific subsectors, namely games, animation, museums, music, craft, and fashion. Other creative subsectors, such as advertising, design, and performing arts, are underrepresented in the literature.

In terms of research methodologies employed within the sample articles revealed a dominance of qualitative approaches as shown from twelve articles (Alexandri et al., 2019; Burnes & Choi, 2021; Chen et al., 2022; Fauchart et al., 2022; Fernandez-Lores et al., 2022; Hsu et al., 2023; Imawan et al., 2023; F. Li, 2020; Matiza, 2020; Purbasari et al., 2020; Raimo et al., 2022; L. Zhang et al., 2023). They utilized qualitative methods to explore the shifting resource landscape of creative businesses in the digital economy, as qualitative methodologies are well-suited for in-depth exploration of experiences, allowing researchers to gain rich insights into how creative businesses navigate this complex environment. However, compare to quantitative research approaches were also present in the sample articles that represented in seven articles only (Ji et al., 2022; Kwon et al., 2022; Pang et al., 2022; Wang et al., 2023; Xi et al., 2022; Yao et al., 2023; L. Zhang et al., 2023).

This study reveals that the creative industries are primarily focused on SMEs, while some studies examine individuals, industries, or large firms. The study also found a concentration of research on specific creative subsectors such as games, animation, museums, music, crafts, and fashion. In addition, regarding to the research methodologies—qualitative approaches are more common, reflecting the distinctive nature of the creative industries.

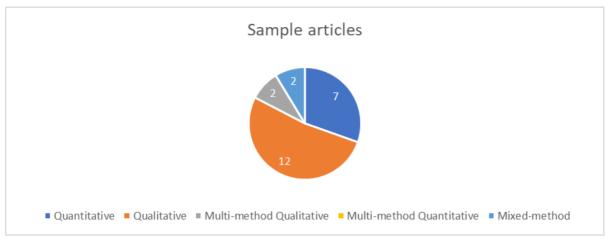


Figure 2: Sample articles according methods

3.2 Research Area

The sample articles indicate the emergence of research objectives that are dominantly emerged within the area of creative businesses and digital economy. Several studies (Burnes & Choi, 2021; Gornostaeva, 2023; Imawan et al., 2023; Kefi et al., 2024; J. Li, 2022; Raimo et al., 2022) highlight the critical role of digital transformation within creative businesses. These studies focus on how these organizations are adapting and integrating digital technologies into their core functions. This digital transformation likely necessitates a shift in a resource allocation, requiring investments in new technologies, upskilling workforce, and developing new digital strategies. Understanding these transformative processes is crucial for creative businesses to remain competitive and leverage the full potential of the digital landscape.

Other emerging theme is the impact of the sustainable development on creative businesses in the digital age. Articles by (Yao et al., 2023 and X. Zhang et al., 2022) which investigate how the digital economy influences the sustainability practices within the creative sector, as both studies highlight the multifaceted contributions of the cultural industry through cultural preservation using technology and economic development. Since, the creative industry's emphasis on innovation, driven by a combination of technical expertise, creative talent, and human capital, which provides a favorable innovation for the industry's development (Zhao et al., 2024).

Furthermore, the theme of key capabilities of industry 4.0 also emerged as represented by (Jahromi & Ghazinoory, 2023) and (Rayna & Striukova, 2021) as they investigate the capabilities needed for industry 4.0 such as automation, data analytics, artificial intelligence (AI). These technologies have the potential to revolutionize creative workflows. However, integrating these technologies will likely require creative businesses to invest in new resources, such training programs for within business team and infrastructure upgrades. Lastly is the impact of digital tools on creative businesses (Fauchart et al., 2022; Fernandez-Lores et al., 2022; L. Zhang et al., 2023) investigate the influence of various digital tools. These tools can enhance creative processes, improve collaboration, etc. Understanding the benefits and drawbacks of digital tools is essential for creative businesses to optimize their resource allocation.

Table 2. Research objectives nom sample articles			
Research Objectives	Sample Articles		
Digital transformation	(Burnes & Choi, 2021; Gornostaeva, 2023; Imawan et al., 2023; Kefi et al., 2024; J. Li, 2022; Raimo et al., 2022)		
Impact of sustainable development	(Yao et al., 2023; X. Zhang et al., 2022)		
Key capabilities of industry 4.0	(Jahromi & Ghazinoory, 2023; Rayna & Striukova, 2021)		
Impact of digital tools	(Fauchart et al., 2022; Fernandez-Lores et al., 2022; L. Zhang et al., 2023)		

Table 2: Research objectives from sample articles

The analysis of research objectives highlights a strong emphasis on the interplay between the creative industries and the digital economy. Digital transformation, sustainability, and the adoption of Industry 4.0 technologies emerged as key areas of interest. These findings underscore the growing recognition of the digital economy's influence on the creative sector and the need for the innovative strategies to navigate this evolving landscape.

3.3 Theories used

This study also explores the theoretical perspectives that previous scholars have used to examine the evolving resource configuration of creative businesses, from which inform to understand resource allocation and management within the creative sectors. Used and gratification theory posits that individual use media to fulfill specific needs and gratification, in this research context this theory might be applied to understand how creative businesses utilize digital technologies to satisfy the needs and desires of their targeted market (Kefi et al., 2024; J. Li, 2022). The second theory is resource-based view (RBV) that suggests a firm's competitive advantage embedded in its unique and valuable resources (Barney, 1991). RBV could be applied to identify, develop, and utilize creative businesses core resources (Landoni et al., 2020; L. Zhang et al., 2023). Rooted from RBVdynamic capabilities extend it by emphasizing more the ability of firms to adapt, integrate, and reconfigure resources to survive in changing environment (Teece, 2010), dynamic capabilities help creative businesses to navigate the dynamic digital landscape such as by integrating new digital technologies, respond to evolving customer preferences, while maintaining competitive edge (Gornostaeva, 2023; X. Zhang et al., 2022). The last theories emerged is creative industry value chain (Alexandri et al., 2019; Jahromi & Ghazinoory, 2023) by outlining the stages involved in the creation and delivery of creative goods and services which helps to analyze how the digital economy is transforming different stages of the creative processes that comprise creation, production, distribution, retail and consumption (Bhatiasevi & Dutot, 2014; Horng et al., 2016).

Theories Used	Sample Articles
Used and gratification Theory	(Kefi et al., 2024; J. Li, 2022)
Dynamic capabilities	(Gornostaeva, 2023; X. Zhang et al., 2022)
Resource-based view	(Landoni et al., 2020; L. Zhang et al., 2023)
Creative industry value chain	(Alexandri et al., 2019; Jahromi & Ghazinoory, 2023)

Theories underpinning the creative industries primarily focuses on organization, with a particular emphasis on resource-based view and dynamic capabilities. While a variety of theories were employed, studies predominantly lean towards understanding how organizations utilize resources within creative value chain. These theories help to explore the role of creativity, innovation, and strategic management in navigating the complex landscape of the digital economy.

3.4 Types of resources used within creative businesses

Resources are assets or inputs to production that an organization owns or accesses (Helfat & Peteraf, 2003), while capabilities refer the ability to utilize resources to achieve organizational goals (Helfat, 2002; Katila & Shane, 2005). Therefore, resources are important for firm's strategic decisions regarding which resources to further develop. Based on our literature review borrowed from (Barney, 1991; Hall, 1992; Karia & Wong, 2013), we identified two resources: tangible resources or physical resources that take form of specialized equipment and physical tools that are used to speed up production and cost advantage. In addition, according to (Barney, 1991) financial resources are included to the physical resources since the they become the firm's capacity to borrow and ability to generate funds through internal operations as highlighted by (Novani et al., 2022; Xi et al., 2022; Yao et al., 2022; Fauchart et al., 2022; Hsu et al., 2023; Imawan et al., 2023; Jahromi & Ghazinoory, 2023; Kefi et al., 2024; Kwon et al., 2022; J. Li, 2022; Rayna & Striukova, 2021; Yao et al., 2023; L. Zhang et al., 2023).

Followed by intangible resources include management expertise resources (Fauchart et al., 2022; Gornostaeva, 2023; Ji et al., 2022; J. Li, 2022; Matiza, 2020; Novani et al., 2022; Purbasari et al., 2020; Rayna & Striukova,

2021; Xi et al., 2022; Yao et al., 2023; L. Zhang et al., 2023; X. Zhang et al., 2022)—the ability to acquire resources to achieve firm's objectives, relational resources (Chen et al., 2022; Hsu et al., 2023) that provide economic value to firm through relationships with customers and suppliers, and organizational resources (Hsu et al., 2023; Landoni et al., 2020; X. Zhang et al., 2022) that helps firms to execute and implement strategies to meet customer requirements, and leads to sustainable competitive advantage (Karia & Wong, 2013).

Types of resources				
Tangible resources	Intangible resources	Sample Articles		
Financial resources		(Novani et al., 2022; Xi et al., 2022; Yao et al., 2023; X. Zhang et al., 2022)		
Technology resources (social media, digital platforms, big data, AI, cloud computing, 3D printing, laser cut, CNC, website, 3D modelling applications, Virtual Reality)	Management expertise resources	(Alexandri et al., 2019; Burnes & Choi, 2021; Chen et al., 2022; Fauchart et al., 2022; Hsu et al., 2023; Imawan et al., 2023; Jahromi & Ghazinoory, 2023; Kefi et al., 2024; Kwon et al., 2022; J. Li, 2022; Rayna & Striukova, 2021; Yao et al., 2023; L. Zhang et al., 2023) (Fauchart et al., 2022; Gornostaeva, 2023; Ji et al., 2022; J. Li, 2022; Matiza, 2020; Novani et al., 2022; Purbasari et al., 2020; Rayna & Striukova, 2021; Xi et al., 2022; Yao et al., 2023; L. Zhang et al., 2023; X. Zhang et al., 2022)		
	Relational resources	(Chen et al., 2022; Hsu et al., 2023) (Hsu et al., 2023; Landoni et al., 2020; X. Zhang et al., 2022)		
	Organizational resources			

Table 4. Creative business'	types of resources from sample articles
Table 4. Creative business	types of resources from sample articles

The findings of this study indicate that the type of resources possessed by creative businesses allow them to focus on key factors in order to participate in the digital economy. The study highlights a greater emphasis on intangible resources for creative businesses although they still require strong foundation of tangible resources. However, creative businesses need a strategic combination of both tangible and intangible resources to adapt with digital economy. For instance, financial and technology are both essential resources, but they might not suffice. Therefore, to navigate the complexities and opportunities presented by the digital economy, it is necessary to balance with strong management expertise, foster relational resources, and develop a supportive organizational culture as well.

3.5 Challenges and opportunities faced by creative businesses

The sample articles highlight several challenges and opportunities encountered by creative businesses to navigate the digital economy. *Technical challenges* that hinder the digital adoption such as integrating new technologies into existing workflows, therefore creative businesses may require additional resources and expertise to overcome these technical hurdles (Chen et al., 2022; Gornostaeva, 2023; Yao et al., 2023; X. Zhang et al., 2022). *Lack of personnel or talent* as highlighted by (Fernandez-Lores et al., 2022; J. Li, 2022; Novani et al., 2022; Xi et al., 2022; X. Zhang et al., 2022) wherein creative businesses lack of qualified human resources with the necessary skills to meet the firms' needs, both creative disciplines and digital technologies. Since this skills gap can impede their ability to fully leverage the potential of the digital economy. *Lack of financial resources* also emerged as underlined by (Novani et al., 2022; Purbasari et al., 2020; Raimo et al., 2022; Wang et al., 2023; X. Zhang et al., 2022; Purbasari et al., 2020; Raimo et al., 2022; Wang et al., 2023; X. Zhang et al., 2022; Novani et al., 2022; Purbasari et al., 2020; Raimo et al., 2022; Wang et al., 2023; X. Zhang et al., 2022; Novani et al., 2022; Purbasari et al., 2020; Raimo et al., 2022; Wang et al., 2023; X. Zhang et al., 2022), for instance investing in new technologies, upskilling the workforce can be costly for creative businesses hence this may restrict firms' ability to fully participate in the digital economy. Lastly, *communication strategies*

also became crucial (Alexandri et al., 2019; Hsu et al., 2023; Kefi et al., 2024; Purbasari et al., 2020) since creative businesses need to develop strategies to communicate effectively with various stakeholders to ensure clear and consistent messaging.

Despite the challenges, these sample articles also identified numerous opportunities presented in the digital economy. *Enhanced learning and collaboration* allow creative businesses to facilitate communication and knowledge sharing between stakeholders, which later foster innovation and the creation of new ideas, particularly by optimizing digital tools and platforms (Burnes & Choi, 2021; Chen et al., 2022; Fauchart et al., 2022; Fernandez-Lores et al., 2022; Hsu et al., 2023; Kefi et al., 2024; Raimo et al., 2022; Rayna & Striukova, 2021; L. Zhang et al., 2023). *Reaching new markets or customers* emphasize the opportunities to reach wider market or customer base through digital channels such as social media platforms, online marketplaces, etc to connect with potential customers, expanding their reach beyond geographic limitations (Burnes & Choi, 2021; Fernandez-Lores et al., 2022; Landoni et al., 2020; Matiza, 2020; Novani et al., 2022; Pang et al., 2022; X. Zhang et al., 2022). *Enhancing digital adoption* as highlighted by (Alexandri et al., 2019; Ji et al., 2022; J. Li, 2022; Rayna & Striukova, 2021; Wang et al., 2023; Yao et al., 2023), allows the opportunities to enhance digital adoption within creative businesses to improve efficiency, streamline workflows which later lead to increased productivity and competitiveness.

Challenges	Sample Articles
Technical challenges	(Chen et al., 2022; Gornostaeva, 2023; Yao et al.,
2	2023; X. Zhang et al., 2022)
Lack of personnel or talent	(Fernandez-Lores et al., 2022; J. Li, 2022; Novani et
	al., 2022; Xi et al., 2022; X. Zhang et al., 2022)
Lack of financial resources	(Novani et al., 2022; Purbasari et al., 2020; Raimo et
	al., 2022; Wang et al., 2023; X. Zhang et al., 2022)
Communication strategies	(Alexandri et al., 2019; Hsu et al., 2023; Kefi et al.,
	2024; Purbasari et al., 2020)
Opportunities	Sample Articles
Enhanced learning and collaboration	(Burnes & Choi, 2021; Chen et al., 2022; Fauchart et
	al., 2022; Fernandez-Lores et al., 2022; Hsu et al.,
	2023; Kefi et al., 2024; Raimo et al., 2022; Rayna &
	Striukova, 2021; L. Zhang et al., 2023)
Reach wider market/customers	(Burnes & Choi, 2021; Fernandez-Lores et al., 2022;
	Landoni et al., 2020; Matiza, 2020; Novani et al.,
	2022; Pang et al., 2022; X. Zhang et al., 2022)
Enhancing disital adaption	(Alexandri et al., 2019; Ji et al., 2022; J. Li, 2022;
Enhancing digital adoption	
Ennancing digital adoption	Rayna & Striukova, 2021; Wang et al., 2023; Yao et

Table 5: Challenges and opportunities faced by creative businesses

3.6 Impact of digital economy on creative businesses' resources allocation strategies

This study explores how the digital economy is affecting the resources allocation of creative businesses. Key findings reveal three primary areas of impact: an increased reliance on digital resources, the importance of collaboration and resource sharing, and the need for evolving resource management practices. *Increased reliance on digital resources* emphasizes the growing importance of digital technologies for creative businesses to create, produce, distribute, and market their creative products and services to be utilized effectively Burnes & Choi, 2021; Gornostaeva, 2023; Imawan et al., 2023; Kefi et al., 2024; J. Li, 2022). *Collaborating and resource sharing* underlines the importance of to foster opportunities for creative businesses to collaborate with other organizations and shared resources which help them to overcome limitations and access a wider range of expertise, technologies, and markets (Alexandri et al., 2019; Burnes & Choi, 2021; Chen et al., 2022; Fauchart et al., 2022; Jahromi & Ghazinoory, 2023; Kefi et al., 2024; Novani et al., 2022; Rayna & Striukova, 2021; X. Zhang et al., 2022). Followed by *evolving resource management practices* that points out the need for new strategies to allocate resources effectively, manage digital assets and to create decision-making based on data (Chen et al., 2022;

Fauchart et al., 2022; Imawan et al., 2023; Jahromi & Ghazinoory, 2023; Kefi et al., 2024; Raimo et al., 2022; Rayna & Striukova, 2021; L. Zhang et al., 2023).

Therefore, the inferences about the impact of digital economy on resources highlight that creative businesses need to develop a strategic approach to resource management by prioritizing investments in digital technologies, building partnerships for resource sharing and collaboration. In addition to the possession of intangible resources for creative businesses, as well as the importance of adaptability and continuous learning so they are willing to learn new skills and adopt new technologies to remain competitive among other businesses. This can be inferred that these studies focused more on exploring the importance of resource management and its impact on the resource allocation.

Impact of DE on resources	Sample Articles
Increased reliance of digital resources	(Burnes & Choi, 2021; Gornostaeva, 2023; Imawan et
	al., 2023; Kefi et al., 2024; J. Li, 2022)
Collaboration and resource sharing	(Alexandri et al., 2019; Burnes & Choi, 2021; Chen et
	al., 2022; Fauchart et al., 2022; Jahromi &
	Ghazinoory, 2023; Kefi et al., 2024; Novani et al.,
	2022; Rayna & Striukova, 2021; X. Zhang et al.,
	2022)
Evolving resource management practices	(Chen et al., 2022; Fauchart et al., 2022; Imawan et
	al., 2023; Jahromi & Ghazinoory, 2023; Kefi et al.,
	2024; Raimo et al., 2022; Rayna & Striukova, 2021;
	L. Zhang et al., 2023)

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Table 5:	Impaci	of digital	economy	on creative	businesses	resources
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4. Conclusion

This SLR paper delves deeper into how the digital economy is transforming the resource configuration of creative businesses. By analyzing precedent studies, the review explores the profound impact of the digital economy on the resource allocation. The findings illuminate the complex interplay of resources within creative businesses in the context of the digital economy. The analysis reveals that the creative industries (CI) are predominantly composed of small medium-sized enterprises (SMEs) which are the focus of this study due to their pivotal role in driving innovation and economic growth within the creative industries, with a research focus on specific subsectors such as games, animation, and fashion. The research area highlights emerging themes of digital transformation, sustainability, and the adoption of industry 4.0 technologies reflecting the growing recognition of the digital economy's influence on the creative businesses and the need for the innovative strategies. In the context of resource management, a variety of theories have been utilized, including Used and Gratification Theory, Dynamic Capabilities, Resource-based View, and Creative Industry Value Chain.

In terms of the resources possessed by creative businesses, the findings revealed greater emphasis on intangible resources compared to tangible resources, along with its impact on the resource allocation. Furthermore, a notable finding is that creative businesses require a strategic combination of both tangible and intangible resources. Unlike other industries, the creative sector's reliance on human capital and creativity necessitates a unique resource configuration. This unique resource profile entails a strategic approach that balances tangible and intangible resources to foster innovation, competitiveness, and sustainability. This includes balancing financial and technological capabilities with strong management expertise, fostering collaboration with stakeholders, and establishing a supportive organizational culture within the team.

The results of this study show that the digital economy has affected the opportunities and challenges facing creative businesses. Challenges include integrating new technologies, lack of personnel or talent, insufficient financial resources, and communication strategies. Conversely, the digital economy also presents significant opportunities such as enhanced learning and collaboration, the ability to reach wider market or customers, and enhancing digital adoption. Therefore, by understanding these two factors, creative businesses that focus more on the human capital, creativity and intellectual property—can develop strategic resource allocation approaches. This includes

optimizing digital technologies, building collaborations, and fostering a continuous learning culture within the team to address gaps and bridge resource limitations that hinder business operations. Lastly, the study also investigates the impact of the digital economy on resource allocation. The findings emphasize (1) the growing importance of digital resources for creative businesses; as well as (2) collaboration and resource sharing with other firms to access wider expertise, and markets. As a result, creative businesses need to adapt their resource allocation strategies and leverage collaboration to fully realize the value of their resources and remain competitive.

This systematic literature review research article contributes to understanding of the dynamic landscape between creative business and the digital economy by providing a comprehensive systematic review analysis of how the digital economy impacts resource allocation to these businesses. Building on this study, we elaborate a future research agenda that proposes to pave way for further exploration of specific resource needs, collaboration models, and resource management practices to empower the creative businesses in the digital era.

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