

Drivers, Challenges, and Impacts of Digital Transformation in the Creative Economy

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Abstract

Digital transformation has significantly influenced the development of the creative economy in the digital era. This study aims to analyze the drivers, challenges, and impacts of digital transformation in the creative economy using a Systematic Literature Review (SLR) approach. Relevant articles published between 2019 and 2025 were collected from reputable academic databases and systematically analyzed. The findings indicate that technological advancement, changing consumer behavior, market competition, and government support are the main drivers of digital transformation in the creative economy. However, several challenges remain, including limited digital literacy, inadequate infrastructure, financial constraints, and data security issues. The study also reveals that digital transformation positively impacts innovation, operational efficiency, market expansion, and business competitiveness within the creative sector. Furthermore, successful digital transformation requires strong human resource capabilities, supportive policies, and sustainable digital ecosystems. This research contributes to the understanding of digital transformation in the creative economy and provides practical implications for policymakers and creative industry practitioners in developing effective digital transformation strategies.

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1. INTRODUCTION

Digital transformation has become one of the main phenomena driving changes in the global economic structure in the era of Industrial Revolution 4.0 [1], [2]. The development of information and communication technology, such as the internet, artificial intelligence (AI), *big data*, cloud computing, and digital media, has changed the way individuals and organizations conduct economic activities [3], [4]. These changes not only affect the technology-based industrial sector but also have a significant impact on the creative economy sector, which relies on creativity, innovation, and the use of knowledge as the main source of economic value creation. In this context, digital transformation is a strategic element that can increase efficiency, expand market access, accelerate innovation, and strengthen the competitiveness of the creative industry at the local and global levels [5], [6].

The creative economy is an economic sector that develops through the use of human ideas, creativity, talent, and intellectual abilities in producing products and services with added value. This sector includes various sub-sectors such as design, culinary, music, film, animation, digital applications, photography, fashion, performing arts, and digital media content [7], [8]. The development of digital technology has driven changes in business patterns in the creative economy sector, especially in the aspects of production, distribution, promotion, and interaction

with consumers. Digital platforms such as social media, *marketplace*, *service streaming*, and internet-based applications provide new opportunities for creative economy actors to reach a wider market at a relatively more efficient cost. This condition shows that digital transformation is no longer seen as an option, but has become a primary need in maintaining the sustainability and growth of the creative economy sector [9], [10], [11].

In addition to providing great opportunities, digital transformation also presents various complex challenges for creative economy actors [10], [12]. One of the main challenges is the low level of digital literacy and technological adaptability, especially among creative micro, small, and medium enterprises (MSMEs). Many business actors still face limitations in digital infrastructure, access to financing, data security, intellectual property rights protection, and human resource capabilities in optimally utilizing technology [13], [14]. On the other hand, the acceleration of technological development has also led to an increase in the level of digital market competition, so that creative economy actors are required to continue to innovate in order to survive in a dynamic and competitive business environment [15], [16].

Various previous studies have discussed the relationship between digital transformation and the creative economy from various perspectives, such as digital business innovation, technology-based marketing strategies, creative entrepreneurship, and the influence of technology on the competitiveness of the creative industry [1], [17], [18]. Other studies have also highlighted how digitalization can improve operational efficiency and expand market access for creative economy actors [19], [20]. However, most of the studies are still partial and focus on certain subsectors, so they do not provide a comprehensive understanding of the driving factors (*drivers*), challenges (*challenges*), and impacts (*impacts*) of digital transformation in the entire creative economy ecosystem.

Based on these conditions, a study is needed that can integrate various previous research findings systematically and comprehensively. *Systematic Literature Review* (SLR) was used in this study because it can identify, evaluate, and synthesize research results in a structured manner, thus providing a more in-depth picture of the development of digital transformation in the creative economy. Through the SLR approach, this study seeks to map the factors driving digital transformation, identify various challenges faced by creative economy actors, and analyze the impact of digital transformation on innovation, competitiveness, and sustainability of the creative economy sector.

This research has novelty value (*novelty*) in the form of compiling an integrated literature synthesis related to the relationship between digital transformation and the creative economy, with a focus on three main dimensions, namely *drivers*, *challenges*, and *impacts*. Unlike previous research that tends to discuss specific aspects in isolation, this study provides a more holistic understanding of the dynamics of digital transformation in the creative economy sector. The results are expected to contribute theoretically to the development of digital and creative economy studies, while also providing practical implications for the government, academics, and industry players in formulating more adaptive, innovative, and sustainable digital transformation strategies.

2. LITERATURE REVIEW

Digital Transformation

Digital transformation is the process of integrating digital technology into all organizational activities and economic sectors, causing significant changes in business models, operational processes, work culture, and patterns of interaction with consumers [21], [22]. Digital transformation is not only related to the use of technology, but also reflects strategic changes in creating added value through digital-based innovation. Technological developments such as artificial intelligence, the internet of things (IoT), big data, cloud computing, and social media have become major factors accelerating the digital transformation process in various economic sectors [12], [23].

In the context of modern business, digital transformation is seen as a strategy to increase organizational efficiency, flexibility, productivity, and competitiveness. The implementation of digital technology enables business processes to be faster, more integrated, and more data-driven, thus supporting more effective decision-making [24]. Furthermore, digital transformation also encourages the creation of new business models that are more innovative and adaptive to market changes.

Several studies have shown that the success of digital transformation is influenced by various factors such as technological readiness, human resource competency, government policy support, a culture of innovation, and the organization's ability to adapt to technological change [25]. Therefore, digital transformation requires not only technological investment but also organizational readiness and an adequate supporting ecosystem.

Creative Economy

The creative economy is an economic concept that places human creativity, ideas, innovation, and knowledge as the primary sources of economic value creation. The creative economy sector develops through the utilization of individual intellectual abilities and creativity in producing products and services that have added economic and cultural value [26]. The creative economy encompasses various subsectors such as culinary, fashion, music, design, film, photography, animation, digital applications, performing arts, and other creative media.

The development of the creative economy has an important contribution to national economic growth because it is able to create jobs, increase community income, and strengthen local cultural identity [27]. In addition, the creative economy sector also has a high level of flexibility in facing global economic changes because it relies on innovation and creativity that continues to develop [28].

In the digital era, the creative economy has undergone a significant transformation through the use of digital technology in the production, distribution, marketing, and consumption of creative products. Digital platforms enable creative economy actors to reach a wider market without being limited by geographic region. Social media and e-commerce have also become primary tools for building communication with consumers and strengthening creative product marketing strategies [29].

Digital Transformation in the Creative Economy

Digital transformation and the creative economy are closely linked because digital technology is a key factor driving innovation in the creative industry. Utilizing digital technology enables creative economy players to create more innovative products, improve service quality, and develop more efficient and competitive business models [10].

Digitalization offers various opportunities for the creative economy sector, such as expanding market access, efficiencies in operational costs, increased productivity, and the development of cross-sector collaboration. The presence of digital platforms also enables creative businesses to promote and distribute products more quickly and effectively. Furthermore, the use of digital data helps businesses understand consumer behavior, enabling them to create more targeted marketing strategies [30].

However, digital transformation in the creative economy also faces various challenges. Limited digital literacy, low technological capabilities, a lack of digital infrastructure, and limited access to financing remain major obstacles to the digitalization of the creative economy sector. Other challenges include data security, intellectual property protection, and high levels of competition in the global digital market [13].

Several previous studies have shown that digital transformation can increase the competitiveness and sustainability of the creative economy if supported by innovation, government policies, and strengthening human resource capacity [9]. However, some studies find that digitalization can increase the inequality between business actors with high technological capabilities and those who still have limited digital access [31]. Therefore, a more comprehensive approach is needed to understand the impact of digital transformation on the development of the creative economy.

Conceptual Framework of the Research

This research focuses on three main aspects of digital transformation in the creative economy: drivers, challenges, and impacts. Drivers encompass factors that drive digital transformation, such as technological developments, changes in consumer behavior, business innovation, and government policy support. Challenges relate to various obstacles encountered in the digital transformation process, such as limited infrastructure, low digital literacy, and high digital market competition. Meanwhile, impacts encompass the impact of digital transformation on innovation, productivity, competitiveness, and the sustainability of the creative economy sector.

Using a Systematic Literature Review (SLR) approach, this study seeks to integrate various previous research findings to generate a more comprehensive understanding of the dynamics of digital transformation in the creative economy sector. This study is expected to serve as a foundation for developing more effective and sustainable digital transformation strategies for creative economy actors in the digital economy era.

3. IMPLEMENTATION METHOD

This study uses a qualitative approach using the Systematic Literature Review (SLR) method to identify, analyze, and synthesize various studies related to digital transformation in the creative economy. The SLR approach was chosen because it provides a systematic, transparent, and comprehensive review of various previous research findings, thus yielding a deeper understanding of the drivers, challenges, and impacts of digital transformation in the creative economy sector.

The research method involved several main stages, including research planning, literature identification, article selection, literature quality evaluation, data extraction, and analysis and synthesis of research results. These stages were systematically designed to ensure high validity and reliability.

Research Design

The research design employed a qualitative descriptive approach based on a systematic literature review. The study focused on collecting and analyzing scholarly articles discussing digital transformation in the creative economy from various academic perspectives. Data sources were reputable international journal articles, conference proceedings, and other scholarly publications obtained through academic databases such as Scopus, ScienceDirect, and Google Scholar.

This research adopts the SLR flow, which consists of three main stages, namely:

1. Planning

The initial stage involves determining the research focus, formulating research questions, and developing a literature search strategy. At this stage, the researcher establishes primary keywords, such as *digital transformation*, *creative economy*, *digital economy*, *innovation*, and *systematic literature review*.

2. Conducting

The implementation phase involved identifying and selecting relevant articles based on inclusion and exclusion criteria. The selected articles were then analyzed to obtain information on the driving factors, challenges, and impacts of digital transformation in the creative economy.

3. Reporting

The final stage is carried out by systematically compiling the results of the literature synthesis and presenting the research findings in descriptive and analytical form.

Data Collection Procedure

The data collection process was conducted through a search of scientific articles using predetermined keywords. The literature search was conducted for the publication period 2019–2025 to obtain research relevant to the latest developments in digital transformation.

The inclusion criteria in this study include:

1. The article discusses digital transformation and the creative economy.

2. Articles are published in scientific journals or conference proceedings.
3. Articles are in English or Indonesian.
4. Articles are available in the form of *full text*.
5. The article has relevance to the research focus.

Meanwhile, the exclusion criteria include:

1. Articles that do not specifically discuss the creative economy.
2. Duplicate articles from different databases.
3. Articles that do not have a clear scientific research structure.
4. Articles that cannot be accessed in full.

Based on the selection process, several articles were obtained that met the criteria and were used as the main sources in the research analysis process.

Data Analysis Technique

The data analysis technique used was thematic analysis. All selected articles were analyzed to identify key themes related to digital transformation in the creative economy. The analysis process involved several stages, namely:

1. Read and understand the content of the article thoroughly.
2. Grouping research results based on certain themes.
3. Identify patterns, relationships, and differences between studies.
4. Synthesize research findings into a more comprehensive concept.

The analysis focuses on three main dimensions of research, namely Drivers of digital transformation in the creative economy, Challenges faced in implementing digital transformation, and Impacts of digital transformation on the sustainability and competitiveness of the creative economy.

Research Validity

To enhance the validity of the research, researchers used literature sources from reputable scientific publications with high relevance to the research topic. Furthermore, the article selection process was conducted systematically based on predetermined inclusion and exclusion criteria. Synthesis of the research results was also conducted by comparing various findings from previous studies to produce more objective and comprehensive conclusions.

Through the Systematic Literature Review approach, this research is expected to provide a deeper understanding of the dynamics of digital transformation in the creative economy and produce theoretical and practical contributions to the development of the digital economy in the future.

4. RESULTS AND DISCUSSION

Research Results

The research results show that digital transformation plays a very significant role in driving the development of the creative economy sector. Based on an analysis of various scientific articles selected using the method *Systematic Literature Review* (SLR), it was found that digital transformation has an impact on increasing innovation, operational efficiency, expanding market access, and strengthening the competitiveness of the creative industry [32], [33]. In addition, the research also identified various driving factors (*drivers*), challenges (*challenges*), and impacts (*impacts*) that influence the implementation of digital transformation in the creative economy sector.

In general, the results of the literature synthesis indicate that the development of digital technology is a major factor driving changes in business models in the creative economy. The presence of digital platforms such as *E-commerce*, social media, *digital marketplace*, and internet-based applications enables creative business actors to expand their market reach globally at a lower cost than conventional methods. Several studies also show that digitalization helps creative economy actors improve service quality, speed up production processes, and strengthen interactions with consumers [3], [19].

Beyond technological factors, changes in consumer behavior are also a key driver of digital transformation. Modern consumers tend to be more active in using digital platforms to search for information, conduct transactions, and access creative products quickly and flexibly. This situation is encouraging creative economy players to develop digital marketing strategies and enhance their technology-based innovation capabilities to meet changing market needs.

However, research results also show that digital transformation in the creative economy still faces various complex challenges [10]. One of the main challenges is low digital literacy and limited technological capabilities among creative business actors, especially MSMEs. Many business actors still experience difficulties in adopting digital technology due to limited human resources, infrastructure, internet access, and financing. In addition, issues of data security, protection of intellectual property rights, and high levels of digital competition are also important obstacles in the digital transformation process [22].

Based on the results of the literature analysis, this study groups the main findings into three main dimensions, namely *drivers*, *challenges*, and *impacts of* digital transformation in the creative economy.

Drivers of Digital Transformation in the Creative Economy

Research results show that digital transformation in the creative economy is driven by various interrelated factors. One key factor is the increasingly rapid development of digital technology. Advances in information and communication technologies, such as social media, *cloud computing*, *big data*, and *artificial intelligence*, are providing opportunities for creative economy actors to improve operational efficiency, accelerate business processes, and create digital-based product and service innovations. The presence of this technology also enables creative business actors to reach a wider market without being limited by geographic area [29].

In addition to technological advancements, changes in consumer behavior are also a key factor driving digital transformation. Modern consumers tend to be more active in using digital platforms to search for information, conduct transactions, and access creative products quickly and flexibly. This shift in consumption patterns is driving creative economy players to develop digital marketing strategies and improve the quality of technology-based services to meet evolving market needs.

Global market competition is also a major driver of digital transformation in the creative economy [10]. The intense competition among businesses demands continuous innovation to ensure creative products and services remain competitive. In this context, digitalization is a crucial strategy for increasing productivity, expanding market networks, and strengthening business positions in the digital economy era.

On the other hand, government policy support also plays a significant role in accelerating digital transformation. Various government programs related to MSME digitalization, digital economy development, technological infrastructure improvements, and digital literacy training are crucial supporting factors in creating a more adaptive and innovative creative economy ecosystem.

Challenges of Digital Transformation in the Creative Economy

Although digital transformation offers numerous opportunities for the creative economy sector, its implementation still faces several complex challenges. One major challenge is the low level of digital literacy among creative businesses, particularly MSMEs. Many businesses lack adequate technological capabilities, thus experiencing difficulties in adopting and optimally utilizing digital platforms [13]. This situation causes the digital transformation process to be slower and less effective.

Limited digital infrastructure is also a significant obstacle to the development of a digital-based creative economy [9]. Unequal internet access, limited technological devices, and poor network quality in some regions cause creative entrepreneurs to experience obstacles in carrying out digital business activities. These challenges are increasingly felt in developing regions that still have limited technological facilities.

Furthermore, limited capital and access to financing are significant obstacles to implementing digital transformation [32]. The digitalization process requires relatively large investments, both for procuring technological devices, developing digital systems, and increasing human resource capacity. Many creative economy players, especially MSMEs, still experience difficulties in obtaining financial support to support this transformation process.

This research also found that data security and intellectual property protection are significant challenges in the digital creative economy ecosystem. The risks of data breaches, digital plagiarism, and misuse of creative works are becoming increasingly prevalent as digital platforms expand. Furthermore, increasing digital competition demands that creative businesses continuously innovate to maintain their presence and competitiveness in the global market.

Impacts of Digital Transformation in the Creative Economy

Digital transformation has had a significant impact on the development of the creative economy sector. One of the main impacts is the increased competitiveness of creative businesses through the use of digital technology in product production, marketing, and distribution. Digitalization enables businesses to reach international markets more cost-effectively, thereby expanding business opportunities and improving their competitive position in the global market [9], [10].

In addition to increasing competitiveness, digital transformation also impacts operational efficiency [34]. The use of digital technology helps accelerate business processes, facilitate communication with consumers, and increase the effectiveness of creative product marketing. Digital technology also enables businesses to obtain more accurate consumer data so that business strategies can be designed more precisely and adaptively [35].

Another impact is increased innovation in the creative economy sector. The advent of digital technology has driven the creation of new products and services that are more creative, interactive, and tailored to modern market needs. Digital platforms also open up opportunities for broader collaboration among creative industry players, accelerating the development of business ideas and innovation.

Digital transformation also contributes to increased income and economic growth. Various studies show that digitalization can increase productivity and expand market access, thereby increasing the profits of creative entrepreneurs [1]. Furthermore, the growth of the digital-based creative economy also contributes to creating new jobs and strengthening the national economy in the digital economy era.

However, digital transformation also has negative impacts in the form of increased competition and dependence on digital platforms. Businesses that are unable to adapt to technological developments risk experiencing decreased competitiveness [15], [16]. Therefore, successful digital transformation requires human resource readiness, policy support, and the strengthening of a sustainable digital ecosystem.

Discussion

The research findings show that digital transformation has become a strategic element in the development of the creative economy in the digital economy era. These findings support the theory of digital innovation, which states that technology plays a key role in creating efficiency, innovation, and business competitiveness. In the context of the creative economy, digital transformation enables businesses to develop more flexible, technology-driven business models, enabling them to adapt to changing consumer behavior and global market dynamics.

This research also shows that the development of digital technology is closely linked to increased creativity and innovation in the creative industry. Digital platforms serve not only as marketing tools but also as a means for collaboration, distribution, and creative product development. This finding aligns with various previous studies that suggest digitalization can accelerate the growth of the creative economy by improving market access and operational efficiency.

However, this study found that the success of digital transformation is heavily influenced by the readiness of human resources and the digital ecosystem. Low digital literacy, limited

infrastructure, and limited access to financing remain key challenges to implementing digital transformation, particularly for creative MSMEs. These conditions demonstrate that digital transformation requires not only technology but also policy support, digital education, and human resource capacity building.

Besides its positive impacts, digital transformation also presents new risks in the creative economy sector. High levels of digital competition require businesses to continuously innovate to maintain their presence in the market. Furthermore, data security risks and intellectual property protection are critical issues requiring serious attention from the government and creative industry players.

Theoretically, this research contributes to the development of digital economy and creative economy studies through a comprehensive synthesis of the drivers, challenges, and impacts of digital transformation. This research reinforces the view that digital transformation is a multidimensional process involving technological, social, economic, and institutional aspects.

Practically, the research findings can serve as a basis for the government and policymakers in designing strategies for developing a digital-based creative economy. Strengthening technological infrastructure, improving digital literacy, supporting MSME financing, and protecting intellectual property rights are crucial steps to accelerate an inclusive and sustainable digital transformation.

However, this study has several limitations. This study only used literature sources available in specific databases, so there may be another relevant research that has not been identified. Furthermore, this research is conceptual in nature and has not conducted direct empirical testing on creative economy actors. Therefore, further research is recommended to use a quantitative or mixed-methods approach to obtain more in-depth and empirical results regarding the implementation of digital transformation in the creative economy sector.

5. CONCLUSIONS

This study aims to analyze *rivers, challenges, And impacts* digital transformation in the creative economy sector through an approach *Systematic Literature Review (SLR)*. Based on the analysis and synthesis of various previous studies, it can be concluded that digital transformation plays a crucial role in increasing innovation, operational efficiency, expanding market access, and enhancing the competitiveness of the creative economy sector in the digital economy era.

The research results show that digital technology developments, changes in consumer behavior, global market competition, and government policy support are the main factors driving digital transformation in the creative economy. However, the implementation of digital transformation still faces various challenges, such as low digital literacy, limited technological infrastructure, limited funding, and issues with data security and intellectual property rights protection. Nevertheless, digital transformation has a significant positive impact on increasing innovation, productivity, business efficiency, and sustainable growth of the creative economy.

This research also shows that the success of digital transformation depends not only on technology adoption but also requires human resource readiness, a strengthened digital ecosystem, and adaptive policy support. Therefore, collaboration between the government, academics, industry players, and the community is crucial for creating an inclusive and sustainable digital transformation in the creative economy sector.

Theoretically, this research contributes to the development of digital and creative economy studies through a comprehensive synthesis of the dynamics of digital transformation. Practically, the research findings can inform policymaking and the development of digitalization strategies for the creative economy, particularly in enhancing the digital capacity of creative entrepreneurs and strengthening technological infrastructure.

This research still has limitations because it only uses literature sources from specific databases and has not conducted direct empirical testing. Therefore, further research is recommended to conduct empirical research using a quantitative approach or *mixed methods* to gain a deeper understanding of the implementation of digital transformation in various subsectors

of the creative economy. Furthermore, future research could also examine the influence of new technologies such as *artificial intelligence*, *blockchain*, and the *metaverse* on the development of the digital creative economy.

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