

Digital innovation strategy for creative industries: responding to competition challenges in the digital age

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Abstract

The creative industries should be able to keep up with competitors' strategies to survive in the contemporary business environment. The depth of the digital touch in every company operation encourages business people to adapt it while developing new products. The purpose of this study was to present an overview of the digital-based innovation strategies employed by the leading creative industries in Bandung. Using a descriptive analysis strategy, the research method employed was qualitative. Techniques for data collection included literature reviews, field investigations, questionnaires, and in-depth interviews. The study's findings demonstrated that strategies for digital-based innovation were not conducted to their full potential. In this particular industry, there was insufficient growth of digitally based products and services, limited responsiveness to digital solutions provided by competitors, a lack of differentiation from competitors, relatively few platforms for digitally based products that were different from competitors, and poor product development. There were no newly developed digital products on the market. In addition, only the process innovation strategy received a positive response regarding the dimensions of a digital-based innovation strategy, even though most were still far from the digitalization process. However, digital implementation was absent from the organization's marketing and product innovation strategies, making them appear inefficient.

Key words: Innovation strategy; digital innovation; creative industries

INTRODUCTION

Business continuity is currently deteriorating in the creative sector, with 60% of enterprises reporting severe impacts and 40% reporting moderate impacts, according to the Ministry of Industry (2020). This situation encourages sensible innovation for growing companies in the creative industry.

Business digitalization has become a prevalent phenomenon, and creative sectors with their advantages of innovative products should undoubtedly adapt. Businesses that fail to successfully adopt transformation through digital technologies to enable significant business enhancements, such as improving customer experience and engagement, streamlining operations, and developing new business models, will eventually succumb to their competitors who succeed in doing so (Fitzgerald et al., 2014). Businesses should incorporate new digital solutions for identifying target client trends to digitize their services, products, or company operations. This allows businesses to better target their product offers. Given the advantages of digitization, innovative digital solutions are viewed as crucial advocates for modernizing businesses across industries in areas including marketing, customer service, human resource management, logistics, and production. Because information technology companies are key stakeholders in the digital ecosystem, businesses find it difficult to achieve digital transformation without utilizing the innovative digital support they provide. Digital innovation in this context, according to Lyytinen et al. (2016), can be defined as innovative information technology solutions that include the latest digital technologies to support business operations.

Creative SMEs have a higher chance of using digital innovation successfully than big businesses (Chae et al., 2014). However, due to the resource constraints they frequently encounter (Street, Gallupe, & Baker, 2017) and the fact that many changes in the business environment are dynamic, innovative SMEs are more susceptible to failure.

Digital innovations can be created by combining certain digital technologies (Fichman & Melville, 2014). According to a recent study, some of these organizational key capabilities include the capacity to imagine how emerging digital technologies may affect existing business models or processes in addition to the willingness to experiment and take calculated risks. Resources such as a supportive organizational culture and the presence of digital talent within the company enable this organizational capability. By prioritizing organizational capabilities over environmental factors in the transformation of digital technology into digital innovation, it may also help to explain why digital technology businesses operating in similar environmental settings may produce noticeably different results (Kane et al., 2015).

According to Scuotto (2017) and Kortmann (2015), the competitiveness that creative SMEs should contend with is outpacing the advances in current business models. Despite the constraints of technical resources, creative SMEs are distinguished by their ownership of creative human resources. Innovative SMEs face a disadvantage in the market as a result of this problem. Additionally, the success of this creative industry depends on its ability to build networks of cooperation and product differentiation (Scuotto et al., 2017). Utilizing digital technology to promote business activity in the creation of products and organizations can boost a company's strategic flexibility to respond to environmental changes at the level of competition (Kindermann, 2014).

The development of the creative economy is concentrated on the leading sub-sectors, such as the craft, culinary, and fashion industries, which contribute the most to the national GDP. (Jakarta: Ministry of Tourism and Creative Economy, Strategic Plan 2020-2024.). The three creative industry sub-sectors contributed the most to the creative economy in 2017. The creative industries that deal with culinary provided 41.69%, crafts contributed 15.70%, and fashion contributed 18.15%. The creative industries of fashion, crafts, and culinary collectively brought in 282 trillion dollars, 166 trillion dollars, and 142 trillion dollars respectively (Opus Creative Economy Outlook 2020).

According to Indonesia's Creative Economy Development Blueprint 2025, Bandung is one of the major areas for future economic development in Indonesia based on creative industries. Given that it was chosen as one of the top five creative cities in Asia in 2017, this city has a lot of potential for the development of the creative economy. In addition, Bandung contributes more economically to West Java than any other city or region, with its share of the region's creative industries reaching 24.67%.

Innovation, adaptation, and cooperation can be used to revive the tourism and creative economies (Strategic Plan 2020-2024, Jakarta: Ministry of Tourism and Creative Economy). One of the measures that organizations in the creative industries have to undertake is to create a sustainable digital innovation

plan. To revitalize their industry, they have to determine what innovation tactics and teamwork concepts need to be developed. For creative industries to succeed, strategic parties' participation is crucial.

To effectively compete in the market and better position itself to handle future developments, the creative industry needs a digital-based innovation strategy (Povolna, 2019). This innovation strategy is crucial, particularly for small businesses that want to compete and acquire additional resources. This is because many enterprises in the creative industry are still MSME-scale and demand high levels of digital innovation capabilities (Saunila, 2020). Innovation in products, processes, organization, and marketing leads to operational success and corporate profits, and various types of innovation capabilities are also associated with export performance (Kafetzopoulos & Psomas, 2015).

To meet the requirements of an effective strategy, efforts to redefine and/or revitalize strategies in a sustainable manner are very relevant in managing threats to the sustainability of leading creative industries in Bandung City. This paper seeks to develop a framework for mapping digital innovation strategies in the leading creative industries of Bandung City.

Creative Industries

The creative economy has the potential to emerge as a powerful new force in the national economy that can consistently contribute significantly. The creative economy, which includes the creative industry, significantly relies on ideas, creativity, and innovation from renewable resources to be able to produce value-added products sustainably (Rofaida, 2019). Innovation that adds value is crucial in today's increasingly competitive business environment. Additionally, this creative industry adds value through its inventive and creative products. The creative industry should undoubtedly develop its business in the current climate of digital competition if it wants to succeed. Entrepreneurs in the creative industries should have a digital-based strategy.

Due to the characteristics of the globalized market, which include a setting that is more competitive than ever, rapid technological development, and shorter product and technology life cycles (Dadfar et al., 2013), many businesses, especially SMEs, should emphasize making innovation the primary driver for sustainable excellence.

A key factor in being able to adapt to the business environment is creativity and innovation due to changes in the business competitive environment resulting in digitalization. Adequate human, financial, or technological resources are needed for the process of producing sustainable innovation (Povolna, 2019). Resources have a significant impact on organizational capabilities across all industries, especially creative industries (Jardon & Martos, 2013). Players in the creative industries should be competent to overcome challenges and devise competitive strategies to achieve their business objectives (Halim et al., 2011). Innovation is typically the foundation of the competitive strategy in the creative sector, making consumer-focused innovation a potential solution to endure and be prepared to compete in the global business challenges. Innovation awareness among business leaders can fuel sustainable growth.

According to Kemenpararekraf (2020), The creation of added value based on ideas derived from creative human resources (creative people) and knowledge-based resources, such as cultural and technological heritage, is referred to as the creative economy. Ideas are both the input and the output of the creative economy (Howkins, 2013). The ability to provide added value based on ideas and creativity can be realized by utilizing the creative industries.

The creative industry uses individual creativity, skill, and talent to exploit individual inventiveness and innovation to create income and employment. The creative industry is characterized by the strategic role that individuals play through their creativity, skills, and talents. It is an economic endeavor that involves the production or use of knowledge and information.

Digital Innovation Strategy

According to Yoo et al. (2012), digital-based innovation refers to new or significantly different business models, processes, or products that were made possible by IT. A sustainable economic digitization process is supported by continuous digital innovation. Concerning digital innovation, cost-effectiveness and technological aspects that appeal to customers are frequently emphasized. All stakeholders involved in the production and distribution process are expected to benefit from continuous digital innovation (Maciejewski & Glodowska, 2020; Rymarczyk, 2020).

Digital-based innovation is described as a product, method, or business model that is regarded as innovative, demands some significant changes on the part of the adopter, and is achieved or made possible by IT' (Fichman et al., 2014; Jeyaraj et al., 2006; Kohli & Melville, 2019).

When it comes to digital innovation, digital competence is required to combine digital technology with the digital skills of entrepreneurial creative individuals. This pertains to businesspeople's capacity to seize market share (Teece et al., 2016). Along with the involvement of person, organizational, and business environment features, the use of digital technology is the main focus of digital innovation carried out in innovative SMEs. (Chan, 2013)

Numerous studies reveal that big businesses lag behind creative SMEs, particularly when it comes to embracing digital technologies (Cataldo et al., 2020). Additionally, although having immense potential, rural creative SMEs have not yet adopted digital technology (AlBar & Hoque, 2019).

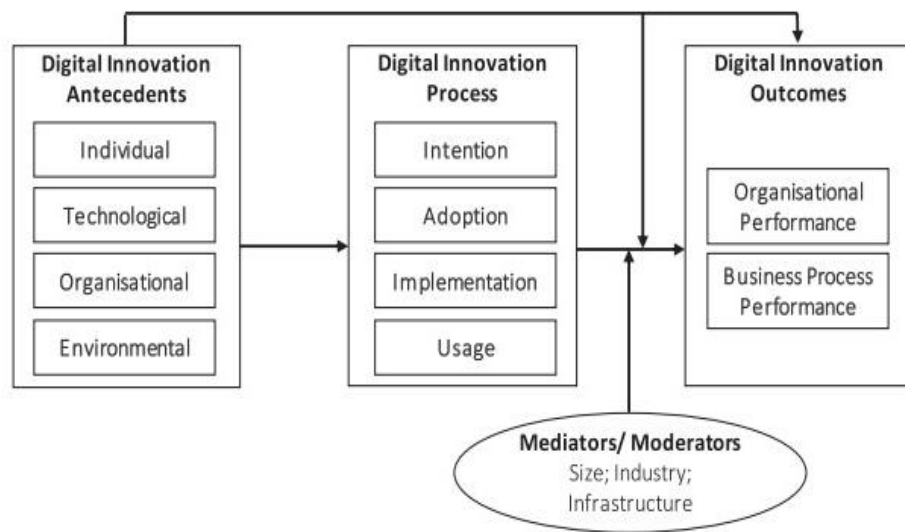


Figure 1.
Digital Innovation in SMEs Framework

According to Nambisan et al. (2017) and Zairis (2000), digital innovation is the successful fusion of digital technology and digital management expertise to innovate in corporate processes and to arrive at creative solutions. In the digital economy, the majority of SMEs operate through implementing new hardware, software, or digital platforms that facilitate transformation. At the same time, IoT and digital orientation support the prospects of a continual digital innovation process. Future economic and environmental concerns cannot be resolved sustainably without digital business transformation (Bican, 2020). According to research, digital innovation has a significant impact on attaining long-term economic growth, lowering unemployment, enhancing the quality of life, expanding access to public services, and reducing costs in various economic sectors (Khan, Aftab, 2015). Digital technology, digital business models, and sustainable digital innovation are all associated with digital transformation as well (Bican, 2020).

Digitally oriented businesses can benefit from value creation and persuade companies to participate effectively in the digital economy (Kane et al., 2015). Businesses in this constantly changing environment benefit from a digital orientation, which assures that they can only survive by implementing the most up-to-date and innovative methods (Cenamor, 2019). Businesses are concentrating on managing digital innovation with a digital orientation to set themselves apart from competitors and get a competitive advantage (Kane, 2016). To accomplish sustainable digital innovation targets and promote the transformation of conventional innovation processes into digital innovation, digitally oriented businesses are prepared to face the associated expenses and risks (Al-Emran et al., 2018).

Nambisan et al. (2017) defined digital innovation as the development of market offers, business processes, or business models as a result of the application of digital technology. As long as these outcomes are made feasible by the use of digital technology and digital processes, their definition encompasses a variety of innovation outcomes, including new products, platforms, and services as well

as new customer experiences and other value lines. This study contextualizes digital innovation as innovative digital solutions that change the products, services, and businesses of other companies. Therefore, according to Ordieres-Mere et al. (2020), digital innovation refers to the creation of new products, services, or solutions utilizing digital technology.

Digital innovation encompasses procedures, organizational techniques, and marketing strategies in addition to product development. Digital innovation is a process that includes several steps, from initial ideas and basic research to technology development and market experimentation through commercialization (Osterrieder, 2020). It does not exclusively rely on collaborative and knowledge-intensive activities.

METHOD

A qualitative technique with descriptive analysis was employed for the investigation. In-depth questionnaires and interviews with company leaders in the leading creative industries (fashion, food, and crafts) in Bandung City were used to collect primary data directly from research participants. Secondary data sources, however, were discovered through literature study. To achieve the goals of the study, a descriptive analysis method was employed with the following stages: data collection, data tabulation, and resource-based viewpoints to suggest an innovation-based strategy for the excellence of the creative industries.

100 prominent representatives of Bandung's leading creative industries who had a thorough understanding of the study's main variable-digital-based innovation strategies in leading creative industries-were selected purposively as thereserach sample.

RESULTS AND DISCUSSION

The role of digital technology in enabling the creative industry to access new opportunities such as improved access to talent and skills, expanded access to markets, increased access to financing, improved communication and collaboration, and expanded access to a wider range of technologies and product applications and development are all integral to the digital innovation strategy (OECD, 2017). Digital technology enables SMEs to compete more effectively with other companies as a result.

The digital innovation strategy approach offers advantages such as cost reduction (Tan, 2010), profitability (Bala & Feng, 2019), globalization (Pergeloya, et.al, 2019), access to product processes (Peón, et.al, 2020), and business model innovation (Bouwman, et al., 2018).

According to Mbuyisa and Leonard (2017), digital technology is viewed as an option that enables SMEs in the creative industries to proceed through the development stage. This technology can aid SMEs in boosting their competitiveness and productivity (Hanclova et al., 2015; Abebe, 2014). The results of field research based on dimensions according to Paladino (2007) show that:

Table 1.
Research based on dimensions according

The development of new products, services or solutions by using digital technology	80 of creative SMEs have not yet created products and services based on digital technology.
The quality of our digital solution is superior compared to our competitors	15% of innovative SMEs were concerned about the digital solutions provided by competitors.
The features of our digital solutions are different from our competitors	5% of innovative SMEs differentiated from the competitors.
The digital solutions are different from our competitors in terms of product platform	5% of innovative SMEs had a digital product platform that sets them apart from competitors.
Our new digital solutions are minor improvements to existing products	90% of innovative SMEs worked on product development.
Some of our digital solutions are new to the market at the time of launching	There were no innovative digital products on the market.

The Application of Digital-Based Product Innovation Strategies

Research Findings

84% of the respondents developed innovative ideas for products. Only 16% of businesspeople took into account digitalization's foundation when creating innovative products such as using digital platforms for benchmarking, considering digital technology for product development ideas, imitating or modifying the strategies of competitors by obtaining digital information, and collecting information on consumer desire to add products or improve products. This situation runs the risk of not being competitive in the digital market;

New product development lagged behind demand in the fiercely competitive digital sector. Tailored customized packaging for client requests via e-commerce (75%) is one example of how creative business players modify existing products; and

Creative businesspeople (76%) consistently raised the price of their products. It is well known that business executives take open price competition on digital platforms into account when deciding on prices and preferred product variety.

Strategy Steps Recommendation

When developing innovative product concepts, manufacturers' and customers' perspectives should be taken into consideration. The objective is for innovative products to succeed in the marketplace. For their products to succeed in the digital market, businesspeople need to adapt to the innovations of their competitors who are already situated in the world of digital products. For customers to access products both offline and online, it needs a distinguishing differentiator; and

To maintain innovation in the inventive products being marketed, the product diversification process needs to be carried out regularly by continuing to develop potential products to be introduced on the market. Product diversification should be implemented while taking consumer behaviour into account.

The Application of Digital-Based Process Innovation Strategies

Research Findings

Innovative business actors enhanced the production process (80%). Digital technology, however, had not been utilized to improve the industrial process, making it less useful and ineffective;

Although creative business actors (98%) aimed to use developments in digital technology to streamline the production process, in reality, they lacked adequate knowledge of the digital world; and

Quality was upheld by creative entrepreneurs (98%) when creating business procedures. Businesspeople should be able to take advantage of opportunities presented by improvements in digitization to improve the quality of business processes and make them more effective and practical.

Strategy Steps Recommendation

Given that creative products require ongoing upgrading, process enhancements for both manufacturing and service operations should be carried out regularly. Additionally, because consumer behaviour and digital services are both evolving rapidly, services should keep up; and

Process improvements should refer to the findings of routine evaluations because they are typically dependent on those evaluations. Even though digital facilities can be used to make the evaluation process more feasible, this process continues to be performed manually.

The Application of Digital-Based Marketing Innovation Strategies

Research Findings

Innovative business actors had improved product costs and packaging designs, but not advertising strategies. The rapid expansion of digital markets necessitates the use of e-commerce promotion strategies in tandem (62%);

Innovative business actors had struggled to produce and market products and product videos in an appealing manner. Digital-based marketing, on the other hand, needs this skill to compete in the digital market (59%); and

Product leaders had not been produced by creative entrepreneurs (55%). Creative industry players were still concentrating on the offline market even though the digital market offers the greatest opportunity.

Strategy Steps Recommendation

Consumer- and digital-based marketing strategies should be implemented by innovative business players to survive the market competition. A variety of marketing strategies are feasible because each creative product has its own market share;

Consumer behaviour is currently evolving toward digital marketing media content, necessitating the ability of creative businesses to keep up with these developments. For instance, by developing engaging product information to promote purchasing interest; and

To develop products that are market leaders and become superior creative products, creative entrepreneurs should consider how to become product leaders in the digital market.

The Application of Digital-Based Organizational Innovation Strategies

Research Findings

Although creative business actors analyzed the rules and SOPs to be followed, they didn't analyze the established business goals (71%). With the aid of modern technology, this is very much combustible. It is possible to prevent procedural errors because all SOPs and guidelines are readily accessible to organizational HR digitally; and

52% of creative entrepreneurs did not yet have a defined organizational structure, task allocation, or roles and duties. Digital applications that can be accessible by anyone, anytime, can make it simpler to divide jobs and responsibilities, ensuring that no steps are missed and that operations can be effectively managed.

Strategy Steps Recommendation

The ownership of transparent work processes will affect the standard of creative output. Before aligning them with procedures and rules, creative entrepreneurs should first determine their business goals. For HR to efficiently complete workflows, business actors should enable access via digital platforms; and

Complex creative business processes should be matched with the creation of a clear organizational structure and work allocation. This will guarantee the high standards that consumers have for creative products and services. Documents related to the organizational structure, work procedures, and standards are all stored on a single internal company digital medium.

The creative industry has several challenges to overcome. As innovative concepts are the primary source of creative products, creative industries have to initially be able to develop creative products that can be renewed. Second, creative business actors should provide products and services that can be used as input for other business actors' inventive endeavours, within and outside the creative industries. The creative industry uses technology extensively, which makes this section a dynamic and innovative business (Rofaida, et al. 2019).

In conclusion, digital innovation in SMEs is motivated by the configuration of four sets of antecedents

(individual, technology, organization, and environment), progresses through a four-stage process (intention, adoption, implementation, and usage), and produces results in terms of organizational and business process performance. The outcomes of digital innovation are directly impacted by a number of its antecedents. The relationship between the digital innovation process and the outcome can also be mediated and/or moderated by these antecedents in addition to other variables (such as size, industry, and infrastructure) (Kim, 2017; Jeyaraj et al., 2006; Melville et al., 2004). It combines the key aspects and relationships of digital innovation in SMEs. Digital innovation in creative SMEs has several benefits, including profitability, competitiveness, and globalization.

Organizations are capable of managing rapid continuous digital innovation by effectively integrating and utilizing digital platforms and technologies, developing dynamic digital capabilities, and adopting a holistic digital orientation (Karunagaran et al., 2019).

Digital innovation has grown significantly among organizations that have used digital platforms. Digital platforms have altered the general economic structure and modified business and organizational frameworks (Parker et al. 2016). One of the main effects of digital technologies (digital orientation and IoT), as represented by digital platforms, is changing how SMEs can acquire an advantage over their competitors. Several studies have been conducted regarding digital platforms and how they relate to ecosystems (Hein, et al., 2020), dynamic and integrative capabilities, performance, platform strategy adoption, the impact of digital platforms on customer behaviour, and online transactions (Hegiu, 2015; Demirkan, 2016). However, there is relatively limited information available about how digital platforms might lead to sustainable digital innovation (Yablonsky, 2018). The function of digital platforms in sustainable digital innovation is shifting from traditional product and service innovation to innovation across business models.

Some researchers have previously demonstrated the significance of adopting digital technology in opening up SME business processes to opportunities that are crucial to value creation or to achieving digital innovation for SMEs (Garzoni, 2020; Rachinger, 2019).

Adopting digitalization trends requires resources, structure, and skill. A more thorough investigation is required to determine the ideal configuration of resources and business models that SMEs need to capitalize on their technology advancements and the required innovative skills to achieve sustainable digital innovation. It is crucial to comprehend how SMEs operate strategically (Yousaf et al. 2018, Hoogendoorn 2017).

CONCLUSION

The findings of the study revealed that initiatives for digital-based innovation were not fully implemented. In this particular industry, there was insufficient development of digitally based products and services, a lack of responsiveness to digital solutions offered by competitors, a lack of differentiation from competitors, an absence of platforms for digitally based products that were different from competitors, and inadequate products development. There were no newly developed digital products available. Furthermore, even though most were still far from the digitization process, only the process innovation strategy obtained a favourable response regarding the components of a digital-based innovation strategy. However, the company's marketing and product innovation initiatives did not incorporate digital technology, making them appear ineffective.

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