

Digital Transformation and Business Resilience in Crisis Contexts

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ABSTRACT

This paper aims to review the role of digital transformation in strengthening business resilience in crisis contexts. The study focuses on the relationship between digital transformation strategy and the multidimensional nature of business resilience. This study uses a conceptual literature review approach. The review synthesizes prior studies on digital transformation, business resilience, organizational resilience, and strategic management. The analysis focuses on how digital technologies are translated into organizational capabilities. The review shows that digital transformation supports business resilience through recovery, adaptation, and anticipation. Digital transformation supports recovery by helping firms maintain operational continuity during disruption. It supports adaptation by enabling firms to redesign business processes and value creation. It also supports anticipation by strengthening information processing and strategic response capabilities. Digital transformation should not be understood merely as technology adoption. It should be viewed as a strategic capability that enables firms to maintain continuity, renew business models, and prepare for future uncertainty. This paper contributes to strategic management literature by integrating digital transformation strategy with the multidimensional concept of business resilience.

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Introduction

Technological changes that experience the continuous growth of information gathering and data processing capabilities increase the need for companies to develop practical competitive actions and responses quickly. Companies need to understand the external environment by obtaining information about competitors, customers, and other stakeholders to build their knowledge base and capabilities (Gur & Greckhamer, 2019). The challenge for every company is to scan, monitor, forecast, and assess the elements in each segment to predict their effect on them (Hitt, Ireland & Hoskisson, 2020). One common environmental segment is technology. Technological change affects many sections of society. Hitt, Ireland & Hoskisson (2020) said the technology segment includes the institutions and activities involved in creating new knowledge and channeling that knowledge into new outputs,

products, processes, and materials. Adopting and the efficient use of new technologies has become very important for global competitiveness and most industries. Countries have started to increase business success in using new technologies (Xiao & North, 2017).

Recently, digital technologies have been seen as an important driver of organizational and business model change. This change is commonly discussed in the literature as digital transformation. Digital transformation should be understood as a strategic process that requires alignment between technology, value creation, organizational structure, and financial considerations (Matt et al., 2015). It is not limited to the implementation of new digital tools. It also requires managerial decisions about how digital initiatives are positioned within the organization. Therefore, digital transformation needs to be managed as part of the firm's broader strategic agenda.

Tekic & Koroteev (2019) says that to increase the chances of survival and success in the market, many companies across industries fail to embark on a significant transformational change trying to integrate digital technology into their business substantially. Some companies are turning digital to optimize processes and see costs, while others see it as an opportunity to create new value by offering products and services like never before (Tekic & Koroteev, 2019). The digital economy has increased understanding of digital services, causing businesses to seek new competitive advantages in the digital space; digital enterprises have developed into more than an online sales meeting. Digital companies use technology to generate new business value styles, customer service, and organizational capacities that support their core business (Elgazzar, El-Shahawy & Senousy, 2021). The global emergency is placing intense pressure on enterprises and digital platforms with which companies in every sector face both opportunities and risks (IBM Homepage, 2020).

The COVID-19 crisis increased the urgency of digital transformation. Firms needed digital technologies to maintain internal coordination and external relationships. Digital transformation also helped firms reorganize processes and value creation during disruption. This role is important because digital transformation affects not only technology use but also business models and organizational change (Vial, 2019). Therefore, digital transformation can be positioned as part of a firm's strategic response to crisis.

Companies worldwide, from low and high-tech industries and universities and government organizations, are investing in digital technology and development to acquire knowledge and build capabilities to implement next-generation business solutions (Tekic & Koroteev, 2019). This paper will discuss how companies must survive by analyzing external factors such as rapid technological changes—digital transformation strategy, which aims to support organizations' better understanding and decision-making strategy.

Despite the growing attention to digital transformation and business resilience, the conceptual relationship between these two constructs remains insufficiently elaborated in literature. Prior studies have often examined digital transformation as a process of technological adoption. Other studies have viewed digital transformation as a process of

business model renewal or organizational change (Hanelt et al., 2021; Vial, 2019). At the same time, the resilience literature has also developed significantly. Earlier studies tended to emphasize resilience as resistance and recovery. More recent studies have expanded the concept of resilience to include adaptation, renewal, and anticipation (Linnenluecke, 2017; Duchek, 2020). However, studies that explicitly connect the strategic dimensions of digital transformation with the multidimensional nature of business resilience remain relatively limited.

Recent studies have begun to address this issue. Gomez-Trujillo and Gonzalez-Perez (2023) conceptualize digital transformation as a pathway to organizational resilience. Awad and Martín-Rojas (2024) show that digital transformation may strengthen organizational resilience through organizational learning and innovation. In the context of small and medium enterprises, Sagala and Ori (2025) suggest that digital transformation strategies can support resilience and antifragility. However, this contribution depends on the presence of learning capability, organizational flexibility, and digital capability. These studies indicate that digital transformation does not automatically generate resilience. Its contribution depends on how digital technologies are strategically embedded in organizational capabilities. It also depends on how digital technologies are connected to value creation processes and decision-making routines.

Based on this gap, this paper aims to review the role of digital transformation in strengthening business resilience in crisis contexts. More specifically, this paper seeks to integrate two streams of literature. The first stream concerns the strategic dimensions of digital transformation. The second stream concerns the development of business resilience as recovery, adaptation, and anticipation. By integrating these two streams, this paper contributes to the strategic management literature. This paper positions digital transformation not merely as a technological response to crisis. Instead, digital transformation is positioned as a strategic capability that enables firms to maintain continuity, renew their business models, and prepare for future uncertainty.

Business Resilience

a. Resilience as Resistance and Recovery

According to Horne and Orr (1998), Resilience is a company's ability to adapt constructively to a significant change that breaks the usual sequence of events without participating in regressive behavior for a lengthy period (p. 31). Furthermore, Linnenluecke et al. (2012) extended the meaning of Resilience by defining it as the companies' capacity to absorb the effect and recover from the actual occurrence of an extreme weather event (p. 18). Meanwhile, in 2013, within the context of Recovery as Resilience, Boin and Eeten (2013), Recovery resilience entails "bouncing back to a state of normalcy" (p. 431). Within the context of Resilience by the following authors, Resilience is synonymous with the Resistance and Recovery of the company.

b. Resilience as Adaptation

The concept of resilience later developed beyond recovery. Several studies began to view resilience as the ability of organizations to adapt to changing conditions. Resilience is not only related to the ability to return to normal conditions after disruption. It is also related to the ability to learn from disruption and develop new organizational responses (Linnenluecke, 2017; Duchek, 2020).

c. Resilience as Anticipation

According to Somers (2009), Resilience "is more than mere survival; it involves identifying potential risks and taking proactive steps of the company to ensure that an organization thrives in the face of adversity" (p. 13). This concept of Resilience invokes the need to understand how to anticipate opportunities and threats. Boin and Eeten (2013) also added: "prevents budding problems from escalating into a full-blown crisis or breakdown" (p. 431). Further, Ortiz-de- Mandojana and Bansal (2015) defined Resilience as an organization's gradual ability to foresee and respond to changes in the environment (p. 6) Based on these perspectives, business resilience can be understood as a multidimensional capability. It includes recovery, adaptation, and anticipation. Recovery helps firms maintain continuity after disruption. Adaptation helps firms adjust to environmental change. Anticipation helps firms prepare for future uncertainty before disruption escalates.

Digital Transformation

Digital transformation initiatives pursue different aims and perspectives. These strategies, based on a business-centric approach, focus on transforming goods, processes, and organizational factors due to new technology. Their scope is more expansive, expressly including digital activities at the customer interface or entirely on the customer's side, such as digital technology embedded in end-user goods. This is a significant distinction from process automation and optimization because digital transformation initiatives encompass changes to and ramifications for goods, services, and business models as a whole (Matt, Thomas Hess, & Alexander Benlian, 2015).

The term "digital transformation" refers to the blending of personal and corporate IT environments, as well as the transformative impact of new digital technologies like social, mobile, analytics, cloud, and Internet of Things (SMACIT) (2008, White). Digital transformation is known as integrating digital technology and business processes in a digital economy in a broad sense (Liu, Chen, & Chou, 2011). Digital transformation is perceived as integrating digital technology and business processes in a digital economy in a broad sense (Liu, Chen, & Chou, 2011). According to Liu et al. (2011), digital transformations are "the integration of digital technologies into business processes." Digital transformation, according to Henriette et al. (2015), is "a business model driven by the transformations connected with the application of digital technology in all parts of human civilization." Hess et al. (2016) described "a business model is driven by the variations associated with the application of digital technology in wholly aspects of human society." Although digital transformation requires digital platforms and technology to affect various aspects of the

organization to generate value, it is also essential to consider precisely how multiple types of digital technology combined with media affect particular elements of the organization. In addition, it is necessary to understand the characteristics of the value created by this transformation (Morakanyane, Grace, & O'Reilly, 2017). Since the tragic COVID-19 pandemic has affected the world dramatically and homework acts dominate the world, it has become clear how significant the digital transformation of many business activities is to ensure the continuity of its operations and thus maintain the corporate competitive advantage. Digital transformation is defined by Vial (2019) and Hinings et al. (2018) as a process that tries to enhance an entity by causing significant changes to its attributes via the use of information, computation, communication, and connection technologies.

The displayed concept of digital transformation demonstrates that its complex character outperformed previous IT-enabled transformations, indicating that new changes are on the horizon. This is upheld by the fact that digital transformation is viewed as one of the real difficulties in all industries lately, without exception, and even though organizations perceive its fundamental significance, they still confront numerous obstacles that repress them from starting, not to mention profiting by, digital transformation (Schuchman & Seufert, 2015). They battle to get business profits by new digital advancements, as contending needs lead to the rundown of regular hindrances (Kane et al., 2015). This maybe is due to a lack of clarity regarding the many options and components that directors must evaluate in their transformation strategy (Hess et al., 2016). Fitzgerald et al. (2014) recommend that a significant minority of organizations have prevailed regarding building up the privileged administrative and mechanical aptitudes to pick up transformational impacts from new digital innovations. They additionally recommend that extra authority and institutional difficulties are likewise looked at by businesses today. Authority challenges incorporate an absence of criticalness, vision, and bearing, though institutional ones are identified with the mentalities of more seasoned specialists, inheritance innovation, development weariness, and legislative issues. The way can best clarify institutional difficulties that most innovation empowered transformations to include a specific level of protection from change shown in the conduct of particular individuals, who declined to acknowledge the new situation (Kumar Basu, 2015). This social hindrance is frequently thought little of and, for the most part, not perceived by organizations (von Leipzig et al., 2017).

There is a question stating, "who is driving your digital transformation? The first two options are CEO and chief digital officer. In this time, it is COVID-19". Based on the change of customer behavior, New consumer groups tried digital products for the first time, such as Video Chat, to hold their business meetings from home. This is increase also happened in B2B (Fitzpatrick, Gill, Ari Libarikian, Smaje, & Zimmel, 2020). As most countries around the world enforce a lockdown on their citizens, it creates a massive demand for digital services. Ordering groceries and telemedicine have become a norm, and hundreds of millions of employees rely on telecommunication services (mobile & fixed broadband) and

collaborative tools to perform their jobs. Studying the new behaviors require attention in several fields to satisfy the customer's new needs, such as (1) serving the customers without touch, e.g., QR code reading menus in the restaurants; (2) digitizing person interaction services such as renewal of identity cards; (3) creating an incentive for customers to switch to online services; (4) increase back-office application to Smooth WFH; (5) create a fast application to meet customer demand; (6) working with the regulator to authorize new products such as telemedicine; and (7) using cloud computing to ease the development and usage of the application (Alatovic, Chhaya, Juneja, Smaje, & Sukharevsky, 2020).

The discussion above shows that digital transformation is not only a technological issue. It also involves changes in strategy, structure, processes, and value creation. These changes are relevant to business resilience because firms need organizational capabilities to respond to disruption. Therefore, the next section explains the method used to synthesize the relationship between digital transformation and business resilience.

Method

This study uses a conceptual literature review approach. This approach is appropriate because the study aims to clarify concepts and develop theoretical arguments. It is also appropriate because the study seeks to integrate fragmented literature into a more coherent explanation. Conceptual papers can contribute to theory by organizing prior knowledge and developing new conceptual relationships (Gilson & Goldberg, 2015).

This study does not test causal relationships empirically. The main purpose of this study is to synthesize prior studies on digital transformation and business resilience. The study also aims to connect these two streams of literature from a strategic management perspective. Therefore, the method focuses on conceptual integration rather than statistical analysis.

The literature used in this study was selected from academic publications on digital transformation, business resilience, organizational resilience, crisis management, and strategic management. The main keywords used to identify relevant literature were digital transformation, business resilience, organizational resilience, digital capability, crisis management, COVID-19, and strategic management. These keywords were chosen because they represent the central concepts discussed in this paper. They also helped identify studies that explain the relationship between digital transformation and resilience in crisis contexts.

The literature was selected based on three criteria. First, the publication had to discuss digital transformation, business resilience, organizational resilience, or crisis management. Second, the publication had to provide conceptual or empirical relevance to the relationship between digital transformation and resilience. Third, priority was given to peer-reviewed journal articles and recent studies published in reputable academic outlets. Industry reports were used only as contextual support and not as the main theoretical foundation.

The selected literature consists of two main groups. The first group includes foundational studies on digital transformation and resilience. These studies are used to

clarify the main concepts and theoretical foundations of this paper. The second group includes recent journal articles on digital transformation and organizational resilience. These recent studies are used to strengthen the conceptual link between digital transformation and business resilience.

The analysis was conducted in three stages. The first stage reviewed the development of the business resilience concept. This stage focused on the shift from resilience as resistance and recovery to resilience as adaptation and anticipation. This shift is important because recent resilience studies view resilience as a dynamic organizational capability rather than a simple return to normal conditions (Linnenluecke, 2017; Duchek, 2020).

The second stage examined the strategic dimensions of digital transformation. This stage focused on technology use, changes in value creation, structural change, and financial considerations. These dimensions were derived from the digital transformation strategy literature. Prior studies show that digital transformation involves changes in strategy, structure, processes, and value creation (Matt et al., 2015; Vial, 2019; Hanelt et al., 2021).

The third stage integrated the resilience literature and the digital transformation literature. This stage examined how digital transformation may support recovery, adaptation, and anticipation in crisis contexts. The integration was developed through conceptual synthesis. This synthesis allows the paper to explain how digital technologies can be translated into organizational capabilities that support business resilience.

The synthesis was guided by the view that digital transformation is not limited to technology adoption. Digital transformation is a strategic process that changes organizational processes, value creation, and business models (Vial, 2019; Hanelt et al., 2021). Therefore, this review focuses on how digital technologies are embedded into organizational capabilities. These capabilities are important because resilience depends on the ability of firms to anticipate disruption, cope with crisis, and adapt after disruptive events (Duchek, 2020).

Results and Discussion

Business Resilience: Adaption, Coping, and Anticipation

To adapt, a firm must have its antennas tuned to external signals of change, interpret them, and move fast to improve or recreate its business model and even redefine the information landscape of its industry. The cycle time of decision-making determines how quickly people adjust. Companies must expedite change in a fast-changing world by making yearly planning procedures lighter and more frequent and by making episodic processes continuous in some cases. The adaptive strategy isn't a one-size-fits-all solution. If your industry is steady and predictable, you might be better off sticking to the tried-and-true methods of gaining an advantage. However, if your competitive reality is unpredictable and changing fast, as it is in an increasing number of sectors, you'll need a dynamic and long-term strategy to stay ahead. Building an organization that can utilize the four skills that make up adaptive advantage might be crucial to your survival.

a. Coping in Pandemic

As a coping strategy, new tactics and practices must be competitive in this changing commercial and economic climate. Years of change in the way firms in all sectors and areas do business have resulted from the COVID-19 disaster. According to a McKinsey Global Survey of CEOs, their companies have cut three to four years off the digitalization of customer and supply-chain relationships, as well as internal activities. In addition, their portfolios' share of digital or digitally enabled products has climbed by seven years.

Consumers have shifted substantially to internet channels during the epidemic, and businesses and sectors have responded in like. The survey's findings support the fast-growing trend of connecting with clients via digital media. (Deimler, 2011) also demonstrate that adoption rates are years ahead of where they were in prior polls, with developed Asia leading the way much more than other areas (Figure 1). Respondents are three times as likely to claim that at least 80% of their consumer contacts are digital now as they were before the crisis. (LaBerge Laura et al., 2020).

The COVID-19 crisis has accelerated the digitization of customer interactions by several years.

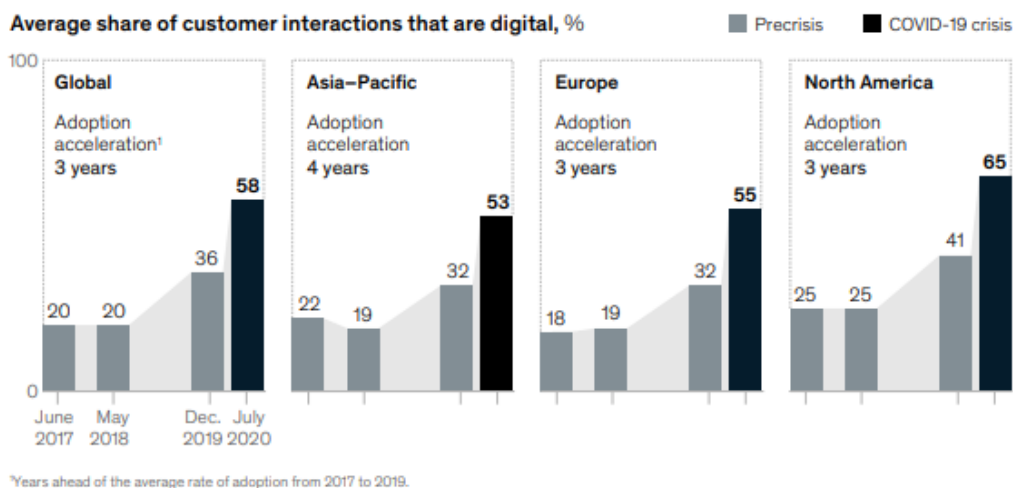


Figure 1. Average Share of Customer Interaction that are digital

Source: LaBerge Laura, O'Toole Clayton, Schneider Jeremy, & Smaje Kate. (2020)

The Dimensions of Digital Transformation Strategies

Digital transformation initiatives have several characteristics regardless of sector or company. These factors may be classified into four categories: technological applications, changes in value generation, structural changes, and financial considerations (Matt et al., 2015).

a. The use of technologies

The application of technologies refers to a company's attitude toward emerging technologies and its capacity to utilize them. As a result, it comprises information about a company's strategic position in IT and its future technical ambitions. A company must determine whether it wants to be a market leader in terms of technology utilization, with the

potential to define its technical standards, or if it chooses to follow existing standards and sees technology as a tool for completing business activities. The application of technologies refers to a company's attitude toward emerging technologies and its capacity to utilize them. As a result, it comprises information about a company's strategic position in IT and its future technical ambitions. A company must determine whether it wants to be a market leader in terms of technology utilization, with the potential to define its technical standards, or if it chooses to follow existing standards and sees technology as a tool for completing business activities. While being a technology market leader can provide competitive benefits and the possibility for other businesses to become dependent on one's technological standards, it can also be dangerous and demand specific technical skills.

b. Changes in value creation

The adoption of new technology frequently results in changes in value generation from a business standpoint. These are concerned with the influence of digital transformation initiatives on companies' value chains or how much new digital activities diverge from the traditional – and frequently still analog – core business. Further deviations provide chances to extend and enhance the current product and service portfolio. Still, they are commonly accompanied by greater demand for alternative technology and product-related competencies, as well as increased risks due to the new field's lack of expertise. If alternative markets or new consumer groups are addressed, digitalization of products or services might permit or demand other types of monetization, as well as alterations to enterprises' business scope.

c. Structural changes

When multiple technologies and types of value generation are used, structural adjustments are frequently required to offer an appropriate foundation for new activities. Structural changes are related to changes in a company's organizational structure, particularly where new digital activities should be placed inside corporate hierarchies. It is also vital to consider if these changes primarily affect products, processes, or skills in this evaluation. It may be more cost-effective to incorporate the new operations into existing corporate structures with minor differences. Still, more significant modifications may need the formation of a distinct subsidiary inside the company.

d. Financial aspects

On the other hand, the first three dimensions may only be modified after financial considerations have been taken into account. These factors include a company's need to respond due to dwindling core business and its capacity to fund a digital transformation project; financial considerations are both a motivator and a constraint for the transition. While less financial strain on the main business may diminish the apparent urgency to respond, organizations that are already in financial distress may be unable to get external funding for a change. As a result, businesses should face the need for digital changes and examine their choices openly and promptly.

The Role of Digital Transformation in Business Resilience in the 21st Century

A business needs to integrate sustainability from a market-by-market approach to the essential infrastructure in every organization. In any region, vulnerabilities may influence the survival and growth of the business. Therefore, Resilience for the organization is needed in a completely uncertain situation. Resilience derives from any level, but business leaders often need to look at it together so that their relationships can gain Resilience. In building

Resilience, digital transformation is essential. Resilient businesses may adopt an operational model with an integrated view of the human-technological relation. This leads to superior financial performance, almost doubling profit growth, and a rise in the business value growth rate (Elgazzar et al., 2021).

Elgazzar et al. (2021) said that new technologies generate tremendous opportunities, but businesses that do not understand and pursue multi-dimensional transitions may be lacking. Here are the four digital transformation forms to boost long-term business resilience in the COVID-19 era. (1) Robotic Process Automation (RPA). Data, analytics, APIs, machine learning, and other advances provide organizations with critical new methods to reinvent internal processes to save costs, shorten cycle times, or enhance efficiency. Companies are introducing technology such as robotic process automation (RPA) to streamline back-office operations like accounting and legal. (2) Modern Business Models. In several businesses, emerging technologies are used to change conventional business models during COVID-19. The transformation of the business model focuses on the essential elements of how industry value is generated. These opportunities' dynamic and strategic nature involves input and leadership from strategies and companies and is frequently initiated as separate projects while the conventional organization continues to function. Changing the critical value building blocks would generate substantial new prospects for growth for businesses that achieve transformed business models. (3) Ecosystems. Indispensable technologies such as artificial intelligence, machine learning, and the Internet of Things (IoT) are examples of essential technologies that improve a company's Resilience (IoT), and enhanced reality can now be accessed not only from the traditional IT supply base but also from the growing start-up ecosystem, where most innovation occurs. Corporations that can effectively reach and harness this innovation, especially from new sources, gain further development. (4) Cultural Change. For a long-term digital change, organizational behaviors, processes and talent, and abilities in the digital world need to be redefined. Digital recognition by top-class organizations includes agile workflows, a preference against testation and learning, decentralized decision making, and increased dependency on market ecosystems. They are also taking aggressive steps to make their business resilience improve (Elgazzar, 2021).

Using technology to create Resilience in business is called digitization which later evolved and gave rise to digital transformation. Digitalization is a key driving force for businesses to stay competitive and relevant. Digitalization can be defined as the process where technologies such as the Internet and information and communication technologies (ICT) such as e-mail, e-business, e-health, e-education, etc. are used to facilitate the exchange of knowledge, information, ideas, and culture among individuals, businesses, organizations, and nations. Fléron's (2021) study shows the importance of digital transformation for business resilience in Denmark's public sector. The study demonstrates how an emergent network of national and local government organizations developed an ecosystem of digital transformation based on the quality of Resilience. The transformation process is itself an ecosystem that extends beyond the organization because the resilience qualities of the various cross-sectoral organizational units grow to become an interactive network of resilient actions. Digitalization strategies and adaptations in one part of the network disrupted digitalization in other regions, which produced further disruption and consequent Resilience. This pattern extends beyond the public sector. Government

organizations find their well-developed capabilities for digital organizational Resilience helpful in adapting to disruptive events arising in their vendor relationships (p. 2400).

According to Casalino et al. (2019), if a digital transformation in the Covid – 19 period is merely viewed as a new tool or an addition to the present firm's structure, it will always fail. In a market where new technologies are constantly being introduced and influencing new client wants, digital transformation must be performed as a complete rethinking of what has to be done. The actual problem in a digital transformation isn't keeping up with all of the technology advances – there are a lot of them, and they're becoming faster all the time – but becoming more quickly, more flexible, more cost-effective, and so minimizing risk and structural complications. Digital Resilience is about balance and collaboration. The balance amid seizing the opportunities and managing the digital dangers an organization faces. The balance of people, procedures, and technology in an integrated and enterprise-wide response to better secure the most precious and valuable information assets. Cooperation between the leadership team and their risk, security, and technology teams and collaboration with other essential business stakeholders (communication, public relations, marketing, legal, procurement, and so on) is critical to success (Armenia et al., 2008).

The previous discussion shows that digital transformation contributes to business resilience through several mechanisms. These mechanisms are related to technology use, changes in value creation, structural change, financial readiness, and learning capability. Each mechanism supports a different aspect of business resilience. Table 1 summarizes the conceptual relationship between digital transformation dimensions and business resilience outcomes.

Table 1. Conceptual Synthesis of Digital Transformation and Business Resilience

Digital transformation dimension	Mechanism	Resilience outcome	Supporting literature
Technology use	Digital communication, remote work, online operations, digital coordination	Recovery and operational continuity	Matt et al. (2015); Vial (2019); Gómez-Trujillo & Gonzalez-Perez (2023)
Changes in value creation	Digital channels, platform-based services, new customer interaction, business model renewal	Adaptation	Hanelt et al. (2021); Sagala & Óri (2025)
Structural change	Agile routines, decentralized decision-making, cross-functional coordination	Adaptation and renewal	Duchek (2020); Awad & Martín-Rojas (2024)
Financial aspects	Investment capacity, resource allocation, ability to fund digital initiatives	Anticipation and preparedness	Matt et al. (2015); Hanelt et al. (2021)

Source: researcher's findings (2026)

Table 1 shows that digital transformation does not contribute to business resilience through a single pathway. Technology use mainly supports recovery and operational continuity. Changes in value creation and structural change mainly support adaptation and renewal. Financial readiness supports anticipation and preparedness. Learning and innovation capability strengthens long-term resilience because firms need to transform disruption into organizational learning.

This synthesis suggests that digital transformation should be understood as a strategic capability. Firms do not become resilient only because they adopt digital tools. Firms

become resilient when digital technologies are embedded into organizational capabilities. These capabilities allow firms to recover from disruption, adapt to environmental change, and anticipate future uncertainty.

Conclusion

This paper concludes that digital transformation plays an important role in strengthening business resilience in crisis contexts. Digital transformation should not be understood merely as the adoption of digital technologies. It should be understood as a strategic process that changes organizational processes, value creation, and business models (Vial, 2019; Hanelt et al., 2021). Its contribution to resilience depends on the ability of firms to align technology use with organizational capabilities, structural adjustment, and strategic decision-making.

The review shows that digital transformation supports business resilience through three main mechanisms. First, digital transformation supports recovery by helping firms maintain operational continuity during disruption. Digital technologies can support communication, coordination, and service delivery when normal business activities are disrupted (Gómez-Trujillo & Gonzalez-Perez, 2023). Second, digital transformation supports adaptation by enabling firms to redesign business processes, customer interaction, and value creation models. Third, digital transformation supports anticipation by improving the firm's ability to collect information, interpret environmental change, and prepare strategic responses to future uncertainty.

Theoretically, this paper contributes to the strategic management literature by integrating digital transformation literature with the multidimensional concept of business resilience. Earlier studies often viewed resilience as the ability to resist disruption and recover after crisis. Recent studies have expanded this view by emphasizing adaptation, renewal, and anticipation as important dimensions of organizational resilience (Linnenluecke, 2017; Duchek, 2020). This paper extends this discussion by positioning digital transformation as a strategic capability that can support recovery, adaptation, and anticipation. This argument is also consistent with studies showing that digital transformation can strengthen resilience when it is supported by organizational learning and innovation (Awad & Martín-Rojas, 2024).

Managerially, this paper suggests that business leaders should not approach digital transformation as a short-term technological project. Digital transformation should be designed as an organizational transformation agenda. This agenda should align digital technology with strategy, structure, resources, and value creation. Managers need to evaluate whether their organizations have sufficient digital infrastructure, financial resources, digital skills, learning capability, and innovation capacity. Firms that are able to integrate these elements are more likely to build resilience in facing future crises.

This study has several limitations. First, this study is conceptual in nature. It does not empirically test the relationship between digital transformation and business resilience. Second, the discussion is developed at a general organizational level. It does not focus on a

specific industry, country, or firm size. Third, the crisis context is mainly discussed through the experience of the COVID-19 pandemic. Future disruptions may have different characteristics and may require different resilience strategies.

Future studies may empirically examine the relationship between digital transformation strategy, digital capability, and business resilience across different sectors. Future research may also examine whether digital capability mediates the relationship between digital transformation and business resilience. Further studies may investigate the role of organizational learning and innovation in strengthening this relationship. Future research may also examine whether environmental uncertainty, leadership, and organizational culture moderate the effect of digital transformation on business resilience.

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