

Digital transformation for small and medium-sized enterprises in Vietnam: opportunities and challenges

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Abstract

This article aims to identify the opportunities and challenges of digital transformation for small and medium enterprises (SMEs) in Vietnam. The author applies a qualitative research method, combining interviews based on the perceptions and experiences of SME leaders and managers in Vietnam. The results of this study show that, in addition to the challenges of digital transformation, the interviewees also shared their views on the opportunities that digital transformation presents for their businesses and organizations, including improving business operations; freeing employees from routine tasks to focus on decision-making; offering solutions to cope with the post-COVID-19 aftermath; enhancing value creation; and helping companies align with global trade standards. The paper concludes with recommendations for policymakers and business leaders to support the sustainable growth of SMEs in Vietnam's rapidly evolving digital landscape.

Keywords: *Digital Transformation (DT), Enterprise (DN), Small and Medium Enterprises (SMEs)*

1. INTRODUCTION

The business and management environment in developing countries differs from that in developed nations. While organizations in developed countries are more concerned with sustainable development, companies in developing countries prioritize creating value for themselves, their shareholders, and their communities. Recently, many technologies have been introduced and applied with the aim of enhancing business capabilities, improving business models, and facilitating sustainable development for enterprises (Boratyńska, 2019). The adoption of these advanced technologies is a part of the digital transformation process (known as DT). The DT process in business is closely associated with organizational planning and strategy in large corporations and multinational companies due to the enormous financial investment required and the management of available human resources, as well as the flexibility and streamlined decision-making processes in small and medium enterprises (SMEs) (Crupi et al., 2020). In developed countries, DT is widely applied in multinational companies or large corporations to upgrade information systems, enabling managers and employees to focus on decision-making (Singh & Hess, 2017), promote regular interaction with stakeholders and customers (Gölzer & Fritzsche, 2017), and improve productivity by using new technologies such as the Internet of Things (IoT), artificial intelligence (AI), and big data analytics to enhance cleaner production

programs and develop environmentally friendly operational strategies (Ardanza et al., 2019; Nguyen, L.T.Q et al., 2021). On the other hand, DT in developing countries like Vietnam aims to provide advanced technological development, create new value and market opportunities (Crupi, et al., 2020), redefine new business models (Frank et al., 2019), and thus facilitate value creation for companies (Boratyńska, 2019). While most studies on DT are conducted in the context of large enterprises in developed countries, research focusing on domestic SMEs and foreign-invested SMEs in developing countries is limited. Therefore, SMEs represent a viable research environment for DT in the real business context of developing countries, as they account for over 90% of enterprises in these countries and employ 60% to 70% of the workforce in the economy (Poole, 2018). While legitimacy theory helps understand the legitimacy of the DT process, stakeholder theory highlights the obstacles in the DT process from the stakeholders' perspective. Moreover, management theory aids in understanding whether the DT process stems from "intrinsic value" or the "desire to do what is best for the organization" (Davis et al., 1997, p. 25). Accordingly, this triadic theoretical perspective underscores the obstacles and benefits of the DT process for SMEs from both internal and external perspectives of SMEs in Vietnam. Additionally, a qualitative research design and interview methods are used as the primary data collection methods in this study. Our article provides both practical and theoretical contributions to DT in SMEs, based on the experiences and perceptions of business leaders regarding their DT process in Vietnam. The remainder of this study includes: Section 2 presenting the literature review, Section 3 describing the research methodology, Section 4 discussing the results, and Section 5 offering conclusions.

2. LITERATURE REVIEW

Considering the use of advanced technologies and their potential benefits in recent years, the concepts of Industry 4.0 have been promoted from an initiative launched by the German government and have gained support from standard setters, practitioners, and researchers (Gölzer & Fritzsche, 2017; Hoang C. V et al., 2021). With the foundation of advanced digital platforms and internet-supported applications, AI analytics, big data, connectivity platforms, and the international business environment, companies have faced changes and shifts toward integrating digital devices into products and services to respond to market changes and customer expectations (Harris et al., 2018; Moldabekova et al., 2021). These processes often take several years as they involve upgrading large-scale information management systems, technologies, and applications (Alibekova et al., 2020; Crupi et al., 2020). Digital transformation (DT) also requires significant human, financial, intellectual, and technical resources, which must be coordinated to ensure a coherent digital transformation strategy (Jang et al., 2019; Hoang et al., 2022). Ultimately, business leaders who pioneer DT are considered fundamental drivers in defining the future direction, competitive positioning in the digital era, persuading

stakeholders to support DT, and making decisions in the DT process for SMEs, including the digitization of organizational structures and operational processes. Moreover, for DT to be successful, it is essential to develop a synchronized organizational and corporate culture that fosters innovation, allowing for the appropriate management and adaptation to changes in digital intensity (Frank et al., 2019; Bui, 2021).

While CEOs of large companies begin to understand the obstacles and benefits of DT, most SMEs, focusing on niche markets, face difficulties and challenges related to digitalization capabilities and managing the intensity of transformation (Gölzer & Fritzsche, 2017). DT can help SMEs leverage and upgrade their operational capabilities, management systems, and decision-making processes, allowing them to participate in the global market (Crupi et al., 2020). However, due to notable obstacles such as a lack of resources for processing, financial investment, and human resources, the success of DT initiatives is less likely. However, there is another type of SME in developing countries, which receives investment from foreign multinational corporations, known as foreign-invested enterprises (FIEs). Compared to domestic SMEs, FIEs benefit from technological advancements and financial investments from their parent companies; therefore, they are expected to achieve successful DT more easily than domestic SMEs (Boratyńska, 2019).

Several theories have been applied to enhance the understanding of DT, primarily relating to theories of innovation management and organizational change (Majchrzak et al., 2016). One of the most prominent theories applied is the legitimacy theory (Battilana & Lee, 2014), which suggests that organizations seek to ensure that all their practices, including DT, fall within the company's limits and standards. In other words, legitimacy theory implies that activities carried out by the organization are considered “legitimate” in the perception of stakeholders. The standards and limits are considered to have changed over time (Eddleston & Kellermanns, 2007). Another theory that can be used to explain the development of DT in an organization is stakeholder theory, in which organizational changes and transformations are rationally planned to meet the needs of various stakeholders. In other words, while legitimacy theory emphasizes the priority of societal expectations, stakeholder theory focuses explicitly on the power of different stakeholders (Freeman et al., 2004). Stakeholder theory posits that the reason for any change in an organization is an effort to maintain stakeholder support (Freeman et al., 2004; Hoang et al., 2020a). Thus, from the perspective of stakeholder theory, a successful organization is one that can manage and meet the diverse perspectives of various powerful stakeholder groups (Nguyen, LQT et al., 2020; Bui, 2021). Legitimacy and stakeholder theories are built from a similar perspective and illustrate an overlapping viewpoint as both theories suggest that an organization is part of a social system, in which it is influenced by and can influence the roles of other parties within this system.

Some management scholars have pointed out that the motivation to implement organizational changes like DT may fall into two aspects: it is “good for the company”

(Westerman et al., 2014, p. 3), aligning with theoretical perspectives, or it is “the right thing to do” (Lo, 2019, p. 120). While much research explores DT from the aspect of being “good for business” (Westerman et al., 2014; Singh & Hess, 2017; Boratyńska, 2019), unlike large or multinational companies, resources to drive initiatives like DT are limited for SMEs (Poole, 2018). Therefore, the fundamental reasons for conducting DT need to be considered from both perspective to action. Management theory is a useful theoretical perspective on action, driven by "intrinsic value" and the "desire to do what is best for the organization," while also maintaining stakeholder satisfaction and legitimacy (Bui, 2021). In other words, from the perspective of management theory, managers tend to practice DT with the goal of facilitating long-term development rather than focusing on the short term.

3. RESEARCH METHOD

The author employs a qualitative research approach aimed at identifying the opportunities and challenges in the digital transformation (DT) process within small and medium enterprises (SMEs) in Vietnam. Six SMEs participated in this study. A common characteristic among these organizations is that they are still in the early stages of integrating DT initiatives into their operations, making them representative of Vietnamese SMEs currently undergoing DT. Our research is based on the perspectives of managers and executives from both domestic and foreign companies, who, as leaders of the DT process, provide insights, experiences, and perceptions regarding the barriers and benefits of DT in the Vietnamese business context.

Before each interview, we emailed the participants to inform them of the study's purpose and the relevant questions concerning DT in SMEs. The interview questions focused on the nature of the DT process to help participants articulate their thoughts, perceptions, and experiences regarding the implementation of DT within their own organizations. A total of 12 interviews were conducted in March 2024. To analyze the research data, we used methods of analysis, synthesis, and statistical processing to arrive at the final results.

4. FINDINGS AND DISCUSSION

4.1. Perceptions of digital transformation

Most interviewees pointed out a lack of understanding regarding the concept and necessity of digital transformation (DT) among stakeholders, which is considered a fundamental limitation to the emergence of DT in Vietnam, particularly for foreign-invested enterprises. For example, one respondent from a foreign-invested SME stated: "In Vietnam, customers always opt for the lowest-cost products or services; they still do not care about the convenience that digital services will bring them in the long run. What we are hearing are two extremes: one person will decide to buy because they have used it before and recognize the brand, while another will buy because it is cheap. These two extremes overlook the long-term benefits of digitized products and services" (Deputy Director, F). Another interviewee from a domestic SME highlighted the limited

awareness and resistance to DT among their managers and employees. Participants indicated that resistance to change and the adoption of new digital technologies stem from a lack of understanding of the new processes and requirements in the DT journey, as well as a fear of extra work, similar to homework, during the transition.

"When talking to most of our employees, I realized that they don't truly understand the advantages of DT. It's not about the difficulties in our work schedule related to DT, but they fear the additional tasks that may be assigned to them if managers require it. Moreover, due to the busy daily work, most employees do not want to learn or take on extra tasks like implementing chatbot software or collecting data and responding to customers through chatbots" (Executive Director, A). However, a recent trend toward digital transformation has emerged across various companies, starting from multinational corporations and large companies. This effort encourages and pushes the domestic business community to reconsider their current business models, as confirmed by an interviewee from a domestic company: "When we heard about the DT strategy of large companies like [...] and even multinational companies and subsidiaries like [...] (our competitors), we immediately thought of a worst-case scenario where we couldn't compete with them. As a result, we were forced to change our perspective, paying attention to the steps we hadn't taken, and considering the DT movement" (Head of Business Development, C).

Regarding DT in Vietnam, most participants, especially those interviewed from SMEs, agreed that DT is still in its infancy, and only a few domestic enterprises have begun to pay attention to this movement. Even those who have started the digitization movement are more concerned about losing their competitive edge than about considering the broader long-term benefits that DT can bring.

4.2. The impact of external factors

External commitment and support, such as advanced technology and knowledge transfer, play a significant role in the DT of most SMEs. "We are developing our digital transformation program from scratch, so the first step is just adopting technologies like chatbots, online payment systems, and accounting software; all of these are very useful. However, we don't believe that these efforts are sufficient for a full digital transformation initiative" (General Manager, B). However, participants still do not view simple technology adoption as the best solution for DT.

Diverse perspectives were mentioned by participants from foreign-invested SMEs, who have inherited knowledge and technology as well as investment management from their parent companies. "Compared to our colleagues in Vietnam, we have received a lot of support from our parent company, and we already have a good business information system, such as our enterprise resource planning (ERP) system, which allows us to

integrate into the business environment in Vietnam. Other supports include some technical experts and even investments to facilitate the adaptation of our commercial information when doing business in Vietnam" (Brand Manager, E). However, another concern from managers of foreign SMEs is the mismatch between the parent company and their current customers. On the one hand, they receive tremendous support for developing digital technology within their company. On the other hand, Vietnamese customers seem to overlook the benefits of advanced technologies and applications.

"Despite many efforts in digital transformation initiated by several national companies in the industry, customers are still unfamiliar with using technologies such as e-pay or internet interaction. Our digitization efforts have only slightly impacted their purchasing behavior" (Digital Officer, F). In contrast to the perception of Digital Officer F, the director of company A witnessed the importance of DT due to stakeholder expectations, and these pressures are likely to increase in the future as DT becomes the norm in most companies worldwide. "I think that, so far, we are doing business, but we also need to see the impacts in the international context, such as when stakeholders experience digitization in companies, they might expect to see similar initiatives in our company" (Director, A).

4.3. Benefits of digital transformation

There is a general consensus that DT can bring benefits to organizations at the start of their development phase. The key expert, a strategist from company A, discussed the improvement in business, management, and functional operations within their company since the DT process began. "Our new technologies and applications enhance operational efficiency and provide us with new ways to interact, communicate, and do business with our customers as well as other stakeholders" (Strategic Planner, A). Additionally, the deputy general manager of company B acknowledged another advantage: freeing up employees and managers from 'repetitive tasks' and allowing them to focus more on 'solving critical problems'.

"Since we now have new applications such as chatbots, learning platforms, and online stores, we don't need as many employees. Instead, our staff and managers can spend more time managing critical issues like planning, decision-making, and budgeting" (Deputy General Manager, B). Furthermore, Deputy Director F provided evidence from their business partner's report, showing how DT has given them the opportunity to increase creative value. "We have started putting most of our products online on several e-commerce platforms with various applications such as chatbots and e-pay. This decision helped us increase sales by approximately 15% in the first month, followed by another 10% in the next two months" (Assistant Manager, F).

Despite recent challenges in DT, participants also shared their views on the benefits gained from their organization's DT journey, including: (i) improved operational as well as business functions; (ii) freeing employees and managers from daily work constraints, allowing them to focus on decision-making tasks; (iii) enabling solutions to cope with post-COVID-19 consequences; (iv) enhancing value creation processes; and (v) helping companies align with global trade standards.

4.4. Challenges of digital transformation

The formation and development of DT initiatives in our case study companies involve the participation of several factors, including resources, top management commitment, and stakeholder support. DT requires not only sufficient resources, commitment, and support from internal stakeholders but also from external ones, such as employees' technological understanding, investors, customers, decision-makers, and standardization bodies. However, the experiences and perceptions of interviewees regarding DT in SMEs emphasized that the challenges to the DT process may include: (i) resistance to any change within their organization from both managers and employees; (ii) the will of stakeholders who call for change and innovation from the organization; (iii) a lack of awareness among stakeholders; and (iv) the potential long-term benefits of the DT process for the organization.

5. CONCLUSION AND RECOMMENDATION

Small and medium-sized enterprises (SMEs) in Vietnam are at a crossroads of opportunity and challenge. The interaction between the growing market, digital advancement, and changing consumer preferences is setting the stage for diverse growth. However, addressing financial constraints, human resources, and regulations on global sustainability principles is crucial. As Vietnam continues its journey as a dynamic emerging economy, Vietnamese businesses have the potential to become significant drivers of innovation, job creation, and economic transformation. By carefully crafting strategies, fostering innovation, embracing digitization, and adhering to sustainable principles, businesses can position themselves to overcome challenges and seize opportunities, contributing to the robust and inclusive growth of Vietnam's economy in the near future.

To support the sustainable growth of SMEs in Vietnam's evolving digital landscape, policymakers should focus on enhancing digital infrastructure and facilitating access to financial resources. Investing in high-speed internet and technology hubs will provide SMEs, especially in rural areas, with the tools needed for digital transformation and global market access. Additionally, establishing government-backed funding programs and encouraging financial institutions to offer tailored products will help overcome financial barriers that SMEs face when adopting new technologies.

Promoting digital literacy and supporting innovation are also crucial. Implementing training programs and integrating digital skills into education will ensure that SME owners and employees are equipped to use digital tools effectively. Offering incentives for R&D and creating innovation clusters can drive technological advancements and collaboration. Simplifying regulatory processes will ease operational challenges for SMEs, while promoting sustainable business practices and developing guidelines for sustainable digital transformation will help balance economic growth with environmental responsibility. Finally, establishing mechanisms to monitor and evaluate digital transformation progress will allow for continuous improvement and better support for SMEs.

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