

Optimizing Sustainable Business Performance: The Role of SME Agility in Digitalization

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To Link this Article: <http://dx.doi.org/10.6007/IJARBS/v14-i1/18431>

DOI:10.6007/IJARBS/v14-i1/18431

Published Date: 04 January 2024

Abstract

This paper investigates the relationship between small and medium-sized enterprise (SME) agility and digitalization in optimizing sustainable business performance. The study aims to explore how SME agility influences the digitalization process and its impact on sustainable business performance. A quantitative methods approach is utilized employing data analysis and surveying a sample of SMEs from Malaysia. The purpose of this study is to reveal the relationship between SME agility and digitalization, and leading to sustainable business performance. The study identifies key enablers of SME agility, such as customer agility, operational agility, and partnering agility emphasizing the importance of strategic alignment between agility and digitalization initiatives to achieve sustainable business performance. This research contributes to the existing literature by highlighting the crucial role of SME agility in the context of digitalization and sustainable business performance. The findings offer practical implications for SMEs seeking to enhance their agility and digital capabilities, enabling them to navigate the challenges and opportunities presented by sustainability and digital transformation. Policymakers and industry stakeholders can utilize these insights to develop supportive frameworks and initiatives that promote agile digitalization practices in SMEs, fostering their sustainable growth in a dynamic business environment.

Keywords: Digitalization, Agility, Sustainable Business Performance, Digital technology, SME.

Introduction

In today's rapidly evolving business landscape, digitalization has emerged as a critical driver for enhancing the agility and performance of small and medium-sized enterprises (SMEs) (Radicic & Petković, 2023). As SMEs face increasing competition, market disruptions, and evolving customer expectations, embracing digital technologies has become imperative for their survival and growth (Scuotto et al., 2021). The importance of digitalization in improving SME agility cannot be overstated. Agility is the ability of SMEs to swiftly adapt, respond, and capitalize on market opportunities and changes (Victor et al., 2014).

Digitalization acts as a catalyst for agility by providing SMEs with the tools and capabilities to be flexible, innovative, and responsive to dynamic market conditions (Guo et al., 2020).

By embracing digital technologies, SMEs can enhance their agility in operational efficiency, reduce costs, and optimize resource allocation (Victor et al., 2014). Digitalization enables seamless communication, collaboration, and faster decision-making within and outside the organization. Additionally, SMEs can gather and analyze data to gain valuable insights into customer preferences and market trends, enabling them to make informed decisions and develop targeted strategies (Burchardt & Maisch, 2019). Digitalization also fosters innovation and allows SMEs to explore new business opportunities and differentiate themselves in the market. By embracing a digital mindset and continuously adapting to technological advancements, SMEs can drive growth and stay competitive in a rapidly evolving business landscape (Burchardt & Maisch, 2019).

However, the successful implementation of digitalization in SMEs requires careful consideration of various factors. Limited resources, lack of digital skills, resistance to change, and concerns regarding data security and privacy are some challenges that SMEs may encounter (Alcalde-Heras et al., 2019; Giotopoulos et al., 2017). Overcoming these challenges requires investment in digital capabilities, fostering a digital-ready organizational culture, and providing training and support for employees (Brunetti et al., 2020).

By embracing digitalization to enhance their agility, SMEs can adapt to market changes more swiftly, respond to customer needs effectively, and achieve sustainable business performance. Digitalization empowers SMEs to become more competitive, innovative, and customer-centric in an increasingly digital world. SMEs must recognize the transformative potential of digitalization, invest in the necessary resources and capabilities, and foster a culture of continuous digital adaptation to thrive in today's dynamic business environment.

Literature Review

Small and Medium Enterprises Digitalization Readiness

SMEs in Malaysia display a willingness to incorporate digital technology into their operations; however, they encounter difficulties in fully embracing digitalization to enhance their business processes (Alcalde-Heras et al., 2019). The constraints of limited resources impede SMEs from adopting the tools needed for digitalization, resulting in sporadic utilization of back-end operational procedures and restricted engagement with social media and e-commerce platforms (SME Corp & Huawei, 2018). Despite a significant presence of computerization within SMEs, they struggle to bridge the digitalization gap and harness the full potential benefits for their enterprises.

A substantial proportion of SMEs in Malaysia continue to rely on traditional sales channels and are hesitant to embrace a fully digital transaction process (SME Corp & Huawei, 2018). This mindset contributes to the limited use of digital communication and marketing platforms. Nevertheless, SMEs must undergo digital transformation to enhance their efficiency, competitiveness, and productivity. The primary obstacles to SME digitization include a lack of capital, a shortage of skilled personnel, and limited technological resources. Funding constraints and a lack of awareness about available options pose significant challenges for SMEs (Kamble et al., 2018; SME Corp & Huawei, 2018).

In conclusion, while SMEs in Malaysia have shown a willingness to adopt digital technology, they encounter challenges in fully capitalizing on digitalization. To surmount

these obstacles, such as limited resources, awareness gaps, and mindset shifts, is essential for SMEs to wholeheartedly embrace digital transformation (Barann et al., 2019; SME Corp & Huawei, 2018). By doing so, they can enhance their efficiency, competitiveness, and market presence, ultimately leading to sustainable growth in the digital era.

Sustainable Business Performance

In today's competitive business world, establishing sustainable profitability is critical. When it comes to maintaining a satisfactory level of performance, Malaysia's Small and Medium-sized Enterprises (SMEs) face an abundance of challenges. In this context, sustainable business performance refers to the consistent attainment and continued achievement of desirable economic, environmental, and social results within a specific framework (Haseeb et al., 2019). It also includes the ability to ensure the ongoing satisfaction of employees and customers, which goes beyond simple financial measurements (Das et al., 2020; Hadi & Baskaran, 2021). Furthermore, it requires meeting stakeholder expectations, which include mitigating negative social and environmental repercussions as well as making active contributions to the benefit of society and the environment (Vo, 2011).

Sustainable economic performance, as proposed by Delrue et al. (2012), involves a thoughtful assessment of cost reduction, market share expansion, and optimization of returns on assets, revenue growth, and improved profitability, all in alignment with economic goals. Conversely, economic well-being is measured by the ability to reduce costs while simultaneously increasing production levels, as elucidated by Grolleau et al., (2013). The enhancement of sustainability performance has the potential to foster greater economic strength, and organizations that exhibit a strong commitment to social sustainability are positioned to outperform their competitors over extended periods, as emphasized by Ghosh (2013) and Jha & Rangarajan (2020). These research findings were published in the scholarly journal "Sustainability and Business Strategy." Furthermore, improvements in environmental performance can result from an elevation in sustainability performance, a concept expounded upon by Eccles et al. (2014). As detailed by Sajan M.P. et al. (2017), progress in economic and environmental sustainability has direct and indirect consequences on the social landscape, which can manifest in either positive or negative ways.

Digital Business Transformation

Digital transformation encompasses the potential changes that digital technology can introduce into an organization's business framework, including the emergence of new products, alterations in organizational structures, and the automation of processes (Clohessy et al., 2017; Hess et al., 2016). These changes may even lead to a complete overhaul of an organization's corporate setup. Furthermore, the utilization of data-driven insights plays a pivotal role in guiding both tactical and strategic business operations, facilitating the creation of digital business models that enable novel approaches to capturing value (Horlach et al., 2017).

In this context, businesses are undergoing significant changes as they move toward digital operations, connecting goods, services, and operations, which presents challenges for organizations due to digital transformation (Li et al., 2018; Ukko et al., 2019). To overcome these challenges, businesses need innovative ways to embrace change (Kallinikos et al., 2013;

Yoo et al., 2012). In the realm of digitalization, competitive advantages are primarily focused on strategy, culture, and developing people, rather than technological issues (Li et al., 2018).

Digital transformations encompass core changes that affect an organization's capabilities, routines, processes, and strategies (Cha et al., 2015; Cui & Pan, 2015). At the heart of a digital business strategy are capabilities, which can be described as "the competency of a bundle of connected routines within businesses for executing particular operations" within the context of a business model (Ngo & O'Casey, 2013, p.1135). According to Schmarzo (2017), the goal of the digital transformation era is to "improve efficiency, enhance customer value, manage risk, and discover new opportunities" by "applying digital capabilities to processes, products, and assets."

As a result, digital transformation has gained significant attention among organizations, particularly as they strive to prioritize it in addressing sustainability challenges and exploring extensive opportunities for delivering products and services (Mihardjo et al., 2019). According to Mihardjo et al (2019), businesses must continually seek to reinvent their business models and seamlessly integrate them with digital technology to remain competitive and financially viable in a dynamic market landscape. Key drivers of this transformation encompass enhancing customer experiences, fostering organizational flexibility, and optimizing operational efficiency (Mahraz et al., 2019; Morakanyane et al., 2017; Rajiani et al., 2018).

Agility

Agility is a concept widely acknowledged and predominantly utilized in the software development sector, particularly within the context of project management (Beck et al., 2001). Nonetheless, its application in the sphere of production and operations management traces back to the early 1990s, as underscored by Nagel's depiction of an "agile organization" in 1992. In this context, agility encompasses an organization's ability to swiftly adapt and respond to ever-evolving requirements, ensuring the prompt satisfaction of customer expectations. In contemporary business landscapes, agility is recognized as a pivotal element in a company's competitiveness and, ultimately, its attainment of sustainable business performance (Almaazmi et al., 2021).

Aligned with the principles of dynamic capability theory, heightened agility empowers organizations to pursue competitive strategies, exemplified by the digital transformation discussed in this research. Organizational agility is defined as the capacity to anticipate market opportunities in advance and promptly seize them, coupled with the ability to swiftly realign internal operations and plans to secure an early advantage, particularly in turbulent circumstances (Chakravarty et al., 2013; Rai et al., 2006; Vial, 2019; Victor et al., 2014).

Agility encompasses an organization's proficiency in recognizing market opportunities for fostering competitive innovation and rapidly capitalizing on them by assembling the necessary assets, expertise, and relationships (Sambamurthy et al., 2003; Tallon & Pinsonneault, 2011). Furthermore, Lu & Ramamurthy (2011) emphasize that organizational agility includes the capacity to adeptly manage unforeseen changes in a turbulent environment and convert these changes into opportunities for growth and success. Additionally, a luminary in leadership and management, operational agility pertains to an organization's endeavors to enhance its existing products or services for its current customer

base by reducing costs, time, or enhancing quality (Denning, 2018). Agility serves as a vehicle for organizations to propel innovation and effectively capture value (Sambamurthy et al., 2003; Teece et al., 2016; Victor et al., 2014).

The primary aim of business transformation is to address unmet customer demands, and organizations can discern and respond to these demands by leveraging three forms of agility (Zelbst et al., 2011). Firstly, agility empowers organizations to identify and respond to customer needs and secondly, it facilitates the introduction of new technology, products, or services into the market (Yasir et al., 2020). Thirdly, by enhancing their business model, organizations can disrupt, enhance, or revolutionize existing markets (Evans et al., 2017). Finally, adaptability enables businesses to establish new markets when necessary (Victor et al., 2014).

Within organizations, agility manifests across three interconnected dimensions: Customer Agility (CA), Partnering Agility (PA), and Operational Agility (OA) (Sambamurthy et al., 2003). These dimensions encompass various aspects of agility, both internally and externally within organizations (Lopes et al., 2017; Victor et al., 2014). While Customer Agility and Partnering Agility encompass external collaboration, Operational Agility pertains to an organization's internal capabilities (Victor et al., 2014). These three dimensions collectively exemplify how organizations can respond to environmental changes in diverse ways.

Customer Agility involves the ability to actively engage customers in the conception and implementation of new ideas, thereby contributing to the discovery and exploitation of innovative opportunities (Victor et al., 2014). Partnering Agility, on the other hand, relates to an organization's capacity to effectively leverage the assets, information, and expertise of suppliers, distributors, contract manufacturers, and logistics providers in its pursuit of innovation (Victor et al., 2014). In contrast, Operational Agility signifies an organization's competence in capitalizing on innovative opportunities with celerity, precision, and cost efficiency (Mihardjo et al., 2019; Sambamurthy et al., 2003; Victor et al., 2014).

Proposed Conceptual Framework

This research proposes a conceptual framework (refer to Figure 2) for determining the sustainable business performance associated with digital business transformation and agility capabilities of SMEs, based on the literature reviewed previously.

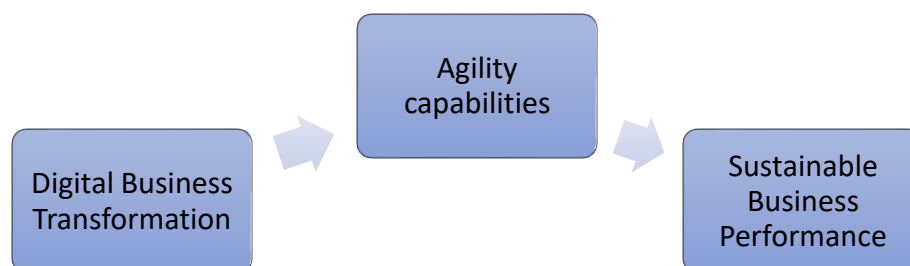


Figure 2. Conceptual framework

Conclusion

Many researchers have predominantly examined the relationship between agility and performance through experimental studies focused on agile manufacturing and its impact on value chain and business performance (Chenhall & Morris, 1995; Lee & Lee, 2017; Sull, 2009). Swafford et al (2006) discovered a positive link between agility and overall competitive performance by studying its influence on the value chain. In addition, Martínez Sánchez & Pérez Pérez (2005) observed that enhanced supply chain flexibility, a key aspect of agility, results in reduced environmental uncertainty, better adaptability to environmental changes, and improved profitability and market share. Moreover, Mohammad Ghasemi (2015) established a significant positive connection between organizational agility, organizational effectiveness, and organizational forgetting. This aligns with the research by Lee & Lee (2017), emphasizing the pivotal role of agility in enhancing organizational performance and gaining a competitive edge in rapidly changing environments.

Based on previous research and logical deductions, prove that the strong evidence supporting a positive relationship between agility and organizational success. Therefore, strengthening organizational agility (von Briel et al., 2018) and enhancing dynamic capabilities (Vial, 2019) can facilitate digital transformation, enabling businesses to gain and maintain competitive advantages (Guo et al., 2020), ultimately leading to sustainable business performance (Haseeb et al., 2019).

In today's dynamic market environment, organizations must work diligently to reinvent their business models and embrace digital technology to remain competitive and profitable (Mihardjo et al., 2019). The digital transformation of organizations is strongly correlated with customer experience, organizational agility, and operational efficiency (Henriette et al., 2015). This transformation, known as digital business transformation, affects various facets of the organization, including operational processes, assets, and relationships with stakeholders (Henriette et al., 2015). Previous research emphasizes three key elements for successful business model innovation: strategic responsiveness to customer expectations, the ability to make swift decisions to drive operational efficiency, and resource flexibility, encompassing a sustainability dimension to facilitate adaptation and agile capabilities in response to change (Doz & Kosonen, 2010). Organizations should prioritize enhancing the customer experience, as research has demonstrated that strong customer relationships significantly contribute to brand and organizational performance by expanding offerings through digital technology (Mihardjo et al., 2019).

Acknowledgment

The authors would like to thank the editors for their valuable time, support, and advice for this article.

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