

DIGITAL TRANSFORMATION OF  
MALAYSIAN SMALL AND MEDIUM  
ENTERPRISES

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# DIGITAL TRANSFORMATION OF MALAYSIAN SMALL AND MEDIUM ENTERPRISES

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# EMPOWERING MALAYSIAN SMEs: NAVIGATING DIGITAL TRANSFORMATION FOR GROWTH AND COMPETITIVENESS

## ABSTRACT

*In the rapidly evolving business landscape, digital transformation is a fundamental strategy for ensuring competitive advantage and operational excellence. This chapter delves into the significance of digital transformation for small and medium enterprises (SMEs), focussing on its pivotal components and the specific context of Malaysian SMEs. Digital transformation is essential for SMEs to adapt to the market demands, improve customer experiences, and drive sustainable growth. The core components of digital transformation for SMEs include e-commerce integration and data analytics. These components facilitate streamlined operations, better decision-making, and improve market reach. Understanding the Malaysian SME landscape reveals a vibrant sector with diverse needs and growth potential. Digital transformation trends in Malaysia reflect a strong move towards adopting e-commerce solutions and leveraging data analytics to gain actionable insights. The chapter also examines government initiatives aimed at supporting SMEs through digital transformation, including funding programmes, training opportunities, and infrastructural improvements. The key components influencing Malaysian SMEs' digital transformation process include the increasing importance of digital consumer engagement and the integration of digital tools into traditional business models. By aligning with these strategies and leveraging government support, Malaysian SMEs could*

*significantly enhance the competitive edge of Malaysian SMEs, positioning them for long-term success in a digitally driven market. This chapter provides a comprehensive overview of these elements, offering valuable insights into how Malaysian SMEs can embrace and benefit from digital transformation.*

**Keywords:** Components of digital transformation; Malaysian SME; government initiatives and support; e-commerce; data analytics; business intelligence

## 1. INTRODUCTION

The digital transformation landscape is evolving so rapidly that it is reshaping the operational paradigms of many organizations throughout the world. With this in mind, SMEs in Malaysia have no choice but to gain a better understanding about the essence of digital transformation so as to understand its benefits for sustainable growth and competitiveness. This chapter delves into the multifaceted realm of digital transformation among Malaysian SMEs. It offers insights and perspectives on the pertinent elements that exist within this dynamic domain. The chapter explores the essence of digital transformation and its various aspects by elucidating its underlying principles, drivers, and implications within the context of Malaysian SMEs. The fundamental components of digital transformation which encompass technological advancements, organizational culture shifts, and strategic imperatives are discussed so as to provide readers with a comprehensive understanding of its transformative potential and challenges. The chapter further expounds on the definitions and characteristics of SMEs in Malaysia, thereby contextualizing their roles and significance within the broader digital transformation discourse. By examining the unique attributes, constraints, and opportunities of the SMEs, this chapter thus underscores the importance of tailoring digital transformation strategies to suit the specific needs and contexts of Malaysian SMEs. Inevitably, this chapter offers insights into the landscape of digital transformation within Malaysian SMEs, also highlighting key trends and initiatives that can shape their digital journey.

### 1.1. Why Digital Transformation Is Crucial for Business

The advent of technology has made the digital transformation imperative for navigating the complexities of the modern business landscape. Digital

transformation is a product of the Fourth Industrial Revolution (IR 4.0). It is a paradigm shift indicating how organizations need to operate and innovate in response to the rapid advancement of digital technologies (Wang et al., 2020). As noted by Brunetti et al. (2020), digital transformation is the fundamental reorganization of current organization works. Consequently, existing business organizations have no choice but to make improvements in their operation and business models.

The evaluation and impact of digital technologies on organizational practices and societal norms have been well documented (Hokmabadi et al., 2024; Phoong et al., 2020; Wang et al., 2020). Šaković Jovanović et al. (2020) observed that digital transformation in business, especially the introduction of electronic commerce (e-commerce), was one of the most significant achievements of the 20th century. E-commerce is a concept that refers to the buying and selling of goods and services via the internet. It is commonly facilitated by digital platforms and technology tools. One of the primary advantages of e-commerce is its capacity to enhance communications between business and their suppliers, and customers. Digital platforms such as instant messaging and online portals enable organizations to establish seamless communication channels with their suppliers for the purpose of streamlining procurement processes and managing their inventories effectively (Cao et al., 2021). Real-time communication allows businesses to respond promptly to customers, market demands, as well as optimize their supply chain operations. This process allows businesses to foster a stronger relationship with their suppliers.

Another significant aspect of digital transformation is noted in the improvement from traditional payment systems to more modern transactions that are faster, more secure, and more convenient for both parties. Diverse payment options, such as digital wallets, online banking, and mobile payments reflect the transformative impact of digitalization on the payment ecosystem (Phoong et al., 2022). Digital wallets are a prominent innovation in the realm of digital payments. They offer users a convenient and secure means of conducting transactions both online and in-store. Google Pay, PayPal, Touch 'n Go, and WeChat Pay are examples of internet-based digital wallets that enable users to store their payment information securely in a digital format, thereby eliminating the need to enter credit card details for each and every subsequent transaction. Users can also make a transaction by scanning a QR code. This reduces checkout time while facilitating transactions.

The widespread adoption of mobile payment solutions has democratized access to financial services, particularly in regions with limited banking infrastructure or access to traditional payment methods. Mobile payment apps

such as Alipay, Touch 'n Go, and WeChat Pay thus leverage on smartphone technology and digital wallets to facilitate peer-to-peer transactions, bill payments, and contactless payments at merchant locations. These innovations allow convenient and secure transactions as they involve contactless service and product exchange as well as payments. The benefit was especially evident during the pandemic period. This evolution of the payment system highlights the transformative potential of the digital world in revolutionizing traditional financial processes. It is thus emphasized that the accessibility of contactless payment options, such as digital wallets, mobile payments, and online payments has made business transactions more efficient, secure, and convenient for both firms and consumers.

Digital transformation transcends technological adoption; it requires a cultural shift and an organizational mindset that is willing to embrace change and innovation. The success of digital transformation rests on strong leadership, organizational support, and the commitment to continuous learning and improvement. One of the key drivers of digital transformation is the desire to remain competitive within a rapidly evolving marketplace. In this regard, organizations must aspire to be more competitive than their competitors by adopting digitalization. Otherwise, they are obsolete in the digital age. Like it or not, digital transformation is not a static phenomenon; rather, it is a dynamic process. It requires organizations to adapt and evolve in response to changing technological trends, customer preferences, and market conditions. While the essence of digital transformation lies in its transformative potential to revolutionize how organizations operate, engage with customers, and create value; the power of digitalization lies in the facilities it can offer to organizations to unlock new opportunities, drive innovation, and position themselves for success within an increasingly digitalized world.

## 2. COMPONENTS OF DIGITAL TRANSFORMATION

Digital transformation is an in-thing and the components involve a range of technological, cultural, and strategic elements that are crucial for businesses to thrive in a digital age. In the world of the SMEs, digital transformation can enable them to remain competitive. The adoption of Internet of Things (IoT), the reengineering of business processes, and the fostering of a digital culture within the organization are components that drive transformation in organizations (Hokmabadi et al., 2024). The following section discusses the core components of digital transformation to enhance the reader's understanding.

## 2.1. Core Components of Digital Transformation for SMEs

The core components for driving digital transformation among SMEs are clear digital strategy and leadership. A robust technological infrastructure, particularly the utilization of internet and e-commerce platforms, offers SMEs more opportunities to expand their market reach and fortify their competitive edge (Abdul et al., 2021). The internet acts as a gateway for SMEs to transcend geographical boundaries, and to access global audiences, a feat that was previously unattainable through traditional brick-and-mortar operations. This gateway enables SMEs to promote products and services to a wider customer base, thereby allowing SMEs to diversify their revenue streams as well as reduce local market dependencies (Mokhtar et al., 2020). E-commerce platforms, on the other hand, strengthen these capabilities by providing SMEs with cost-effective solutions for setting up virtual storefronts, managing secure transactions, systematically delivering products, and managing inventories. This digital infrastructure facilitates customer interactions and transactions as well as endows SMEs with the competitive edge to compete with larger enterprises.

Further to that, the use of data and analytics to gain insights into customer behaviour, market trends, and operational performance can facilitate decision-making. Customers' experiences with a particular product or service are important as the experiences can gauge their satisfaction and loyalty. Based on customers' experiences, new ideas about the products or services can thus be extended to customers. This continuous improvement is essential for long-term success in the rapidly emerging digital economy.

It is also critical that SMEs develop the necessary skills and capabilities that can support digital transformation capabilities. This means upskilling existing employees while making initiatives in identifying new talents and recruiting them. In other words, continuous learning and development are essential for a workforce to remain competitive in the digital age (Abdullah et al., 2020). After discussing the core components of digital transformation for SMEs, the next section will discuss the Malaysian SME landscape to provide a thorough understanding of the various categories of SME structures.

## 3. UNDERSTANDING THE MALAYSIAN SME LANDSCAPE

The Organization for Economic Cooperation and Development (OECD) disseminated a policy brief in 2017. This policy brief underscores the lack of a globally standardized definition for SMEs. The vagueness was further compounded

by the diversity seen in regulatory frameworks for SMEs across nations where the different legal and policy landscapes of the respective countries had led to the different criteria set up for categorizing businesses within the SME sector.

To a certain extent, Malaysian SMEs fare better. SME classifications adhere to a more specific set of criteria which has been stipulated by SME Corporation Malaysia. This national corporation had classified SMEs into two primary categories based on metrics that are related to the number of employees and total annual revenue. The differentiation is particularly pronounced between manufacturing firms and service-oriented enterprises. In the case of manufacturing firms, it is necessary that they have an annual sale of below RM50 million while also maintaining a workforce that is fewer than 200 full-time employees. The dual criteria set is essential for encapsulating both the financial scale of the business and its human resource capacity ([SME Corp. Malaysia, 2021a, 2021b](#)). These criteria reflect an acknowledgement of the different operational scales that characterize manufacturing enterprises within the Malaysian economic landscape.

Apart from the above, categorization of the service-oriented SMEs in Malaysia is contingent on a slightly distinct set of metrics. Specifically, service firms are considered SMEs if their annual sales do not surpass RM20 million, and if they employ fewer than 75 full-time workers. The classification considers the unique operational dynamics, and revenue structures that are characteristic of service-oriented enterprises; it acknowledges the service firms' distinct economic contributions, and market dynamics compared to other manufacturing counterparts.

In Malaysia, SMEs are demarcated based on the number of employees and annual revenue. This practical framework was created to align with the intricacies of the country's economic landscape. It facilitates a more targeted approach in supporting and regulating businesses within the SME sector. The approach is pragmatic as it acknowledges the diversity of enterprises that are operating within the Malaysian economy. Most of Malaysia's SMEs, as reported by the [World Bank Group \(2022\)](#), are essential to the country's economy due to their ability to boost gross domestic product (GDP), generate employment opportunities, and promote exports. The Malaysian government has implemented a range of strategies and policies as outlined in the Second Malaysia Plan (1971–1975), the Third Malaysia Plan (1976–1980), and the Fourth Malaysia Plan (1981–1985) which were aimed at supporting the SMEs. Focussing on SMEs, these initiatives were designed to bolster the industry by expanding Bumiputera entrepreneurship, stimulating employment and production rates, reducing wealth gap within the nation, and promoting equilibrium between business and industrial activities.

About 97.2% of all business entities in Malaysia are SMEs (including microenterprises). This accounts for 13.5% of all exports, 48% of the GDP, and 48% of unemployment (Department of Statistics Malaysia, 2020b). Based on the World Bank Group (2022), Malaysian SMEs experienced a steady expansion before 2020. The statistics indicated that SMEs had increased by 6.2% in 2018 and by 5.8% in 2019. These growth rates were significantly higher than both the national GDP growth rate and the GDP growth rate for non-SMEs. SMEs evidently play a crucial role in contributing to the GDP as SMEs are substantial for job creations; they contribute to the local communities and the region's economy besides supporting local suppliers and community development.

#### 4. DIGITAL TRANSFORMATION – TRENDS AND INITIATIVES FOR MALAYSIAN SMEs

Digitalization is defined as 'the use of cutting-edge digital technologies to transform a business model and provide new revenue and value-generating opportunities' (Gartner, 2023). Businesses need to invest in new and digitally enabled strategies and models as the world progresses in order to meet the market demand. Digitalization can create 'unpredictable opportunities' and offer businesses the ability to innovate new models, products, and services. As digitization is a key driver of productivity growth and, in turn, wage growth, these disparities have led to a widening inequality between individuals, regions, and businesses. There are numerous studies on digital transformation in general, but not much has been researched on the digital transformation of Malaysian SMEs.

In the context of Malaysia, SMEs are vital to the economy. Thus, they need to undergo digital transformation based on the dynamic nature of the globalized digital economy. Digital transformation is a pervasive process that involves comprehensive organizational changes which can ultimately develop novel business models for the company or industry (Hasan et al., 2022; Kane et al., 2015; Pagani & Pardo, 2017). In the view of Teece (2010), a business model is the manifestation of 'how a company creates and delivers value to customers and then converts the payments received into profits'.

Digital transformation instigates companies to incorporate new business models through innovative business logic, for the purpose of generating greater values (Ammeran et al., 2023; Pagani & Pardo, 2017). Its application could affect the entire organizational structure. It transcends mere digitalization which involves altering basic organizational processes and tasks. Instead,

digital transformation orchestrates a restructuring of processes that modifies the business logic of a firm (Li et al., 2018) or its value creation process (Gölzer & Fritzsche, 2017).

The transformative use of Information Technology (IT) induces fundamental alterations to existing business processes, routines, and capabilities. It allows healthcare providers, for instance, to enter new markets or to exit current ones (Li et al., 2018). Digital transformation also leverages on digital technologies to facilitate interactions across borders with suppliers, customers, and competitors (Singh et al., 2020). To date, the local government has even introduced several initiatives and support systems specifically aimed at assisting SMEs in the digital transformation process. These efforts include training programmes, and funding opportunities to facilitate the implementation of new technologies and to improve the overall operational efficiency (Economic Planning Unit, 2020). All these show that advancements in e-commerce, data analytics, and business intelligence contribute to the transformation of SMEs in Malaysia.

#### 4.1. Government Initiatives and Support

The Department of Statistics Malaysia (2021) indicates that the Malaysian government encourages digital transition which was most evident during the COVID-19 pandemic. Currently, the government has introduced several initiatives and strategies.

One of the strategic plans initiated to manage the economic challenges during the COVID-19 pandemic was the *Penjana* Economic Stimulus Package (Muhamad Khair et al., 2021). Introduced in June 2020, its main objective was to stimulate economic recovery by means of supporting businesses, reducing unemployment rate, and bolstering the key sectors of economy. The *Penjana* Economic Stimulus Package also aimed to implement various initiatives and measures across multiple sectors such as providing wage subsidies, hiring incentives, and reskilling employment programmes. Thus far, a total of 124,526 individuals had participated in the reskilling and upskilling programme provided by several ministries and agencies (Department of Statistics Malaysia, 2020b). In addition, the *Penjana* Economic Stimulus Package also offers financial assistance and support to businesses such as SMEs. One of its key strategies was the SME Digitalization Grant which provides eligible SMEs with grants up to RM5000 as incentive to adopt digital technologies. The objective is to enable SMEs to equip their online presence and to expand their digital capabilities (MyGovernment, 2024). This grant can be utilized