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Anas Abu Jaish, Rafiq Murdipi, Dzuljastri Abdul Razak, Norhayati Mohd. Alwi

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The Effect of Digitalization on the Sustainability of Malaysian SMEs

Anas Abu Jaish, Rafiq Murdipi, Dzuljastri Abdul Razak,
Norhayati Mohd. Alwi

International Islamic University Malaysia, Gombak, Malaysia

Email: j.anas@live.iium.edu.my

Abstract

In many developing countries SMEs are considered as one of the main contributors to their economic growth. Despite this achievement, SMEs across different sectors, face various challenges and issues, including those SMEs in Malaysia. Covid-19 pandemic is one of the most recent issues that particularly affect the business operations Malaysian SMEs. Due to the implementation of the Movement Control Order (MCO), Malaysian SMEs struggles in handling the situation which caused limited supplies, huge drop in sales, less cash flows, and restrictions on face-to-face dealings. Enormous number of Malaysian SMEs have discontinued their business operations and failed to survive during this critical juncture. The phenomena alarmed the concern over the sustainability issue of SMEs. Sustainability requires businesses especially SMEs to be more profitable and respond faster to market changes. SMEs' sustainability would be attained if their resources are more sufficient and flexible. In responding towards sustainability issues during the uncertain environment, many SMEs have adopted technological advances and digitalization. Although initiatives in adapting technology existed among the SMEs and have proven to be valuable in supporting SMEs competitiveness, many faced failures in successfully adapting it due to various challenges. Digitalizing SMEs activities are challenged by the need for large capital, lack of specific resources, lack of knowledge, insufficient funds, inadequate planning and technological incapability. This paper deliberates the importance of having dynamic resource capabilities in ensuring a successful adaptation of digitalization by SMEs. The discussion is extended on the need of dynamic capabilities in handling uncertain issues, which eventually determines their sustainability.

Keywords: SMEs, SMEs Challenges, Sustainability, Dynamic Resources, Digitalization, Malaysia

Introduction

Small and Medium Enterprises (SMEs) contribute 98.5% to the Malaysian economy and are considered the main contributor to the Malaysian economy. Yuena and Nga (2020) reported that SMEs have contributed to the Malaysian economy by 98.5% and play an important role in the Malaysian economy. The contribution of SMEs in Malaysia's GDP in 2019 has been increased to 552.3 billion approximately 38.9% compared to the contribution in 2018 which

was 522.1 billion approximately 38.3% (Department of Statistics Malaysia, 2020). Small and Medium Enterprises (SMEs) play a significant role in the economy regardless of sector or size. For example, the manufacturing and services sectors of SMEs are the main contribution for entrepreneurship by enhancing innovation, initiating job opportunities, and improving the economy (Abd Aziz et al., 2021; Abd Aziz et al., 2019; Abd Aziz et al., 2021).

Despite of the narrated development and growth, SMEs across sectors in Malaysia still face various challenges. Researchers have unveiled many important issues such as skills and knowledge, financial issues, supply chain issues, governance issues, globalization as well as uncertainties regarding politic, economic, natural disasters, sustainability, digitalization and humanization (Parker & Castleman, 2007; Dharmalingam & Kannabiran, 2011; Hashim, 2008; Levy & Powel, 2004; Cui et al., 2008; Jones et al., 2005; Beheshti & Salehi-Sangari, 2007; Duan et al., 2012). Furthermore, Frank, Dalenogare and Ayala (2019) reported that manufacturing SMEs face difficulties in adopting industry 4.0 effectively.

Recently, SMEs around the world have been challenged by the Covid-19 related issues. Anuar conducted a survey in 2020 and identified that 69.9 percent of Malaysian SMEs have lost half of their incomes. In addition, many Malaysian SMEs postponed or cancelled their projects due to the Movement Control Order (MCO) that caused restrictions on face-to-face dealings, limited supplies due to the closure of operations and low sales which leads to less cash flow for the businesses. Accordingly, The Organisation for Economics Cooperation and Development (OECD) has outlined various challenges faced by SMEs due to the pandemic in 2020. This includes millions of workers losing jobs, shortage of supplies (Smith-Bingham & Hariharan, 2020; Sneader & Singhal, 2020), cash flow problems, discontinued business operations, as well as disruption to future growth and expansion (Wahyudi, 2014; Craven et al., 2020; Smith- Bingham & Hariharan, 2020). Major industries that are affected massively are travel-related industries including tourism, hotels, restaurants and so on (Segal & Gerstel, 2020). As a consequence of this turmoil, many SMEs had failed and were unstable, and were highly dependent on financial assistance and support from others, especially from the government and financial institutions (Ahmad et al., 2020). Hence, this raised the concern over SMEs sustainability in their operations, especially during the period of uncertainty and hardship. Most businesses are exposed to negative effects in either short or long-term sustainability period.

Discussion on sustainability leads to the thorough assessment of the nature of resources needed by the SMEs in being capable to handle turmoils and survive in the long-term period of time. Businesses need to focus more on their resources and transform these resources into superior performance and competitive advantages. Few literatures have identified what and how resources should be developed for this purpose (Barney, 1986; Hamel and Prahalad, 1996). One of the main aspects which helps SMEs to be more sustainable is to digitalize their resources and become more flexible, dynamic and competitive in the market. Digitalization is becoming increasingly prevalent in all aspects of life and is being embraced by many sectors, including banks, governments, policymakers, academics, businesses, and experts. It is essential for individuals and businesses to adapt to this rapid shift in order to avoid difficulties and remain competitive in the market. Digital transformation is seen as a way for companies to improve their operations and achieve their goals, growth, and success. Digitalization also provides small and medium-sized enterprises with the opportunity to expand their business globally and offer customers more options in Malaysia and around the world (Faridi & Malik, 2019; Digital News Asia, 2019.)

This paper focuses on how small and medium-sized enterprises in Malaysia can maintain sustainability during times of market uncertainty. It investigates the resource capabilities specially digitalization that can help stakeholders effectively manage uncertainty in business operations. This study adds to the existing literature by considering digitalization as potential challenges in addressing uncertainty. The study also emphasizes the importance of implementing proactive approaches for managing uncertainty in business operations in order to not only increase profitability, but also improve stability and sustainability in the market despite challenges. The findings of this study will be useful for various organizations, including government and non-governmental institutions, policy makers, and agencies like banks and SMECorp, as well as Amanah Ikhtiar Malaysia (AIM), Tekun, and MATRADE. These agencies will be able to use the information to determine the extent to which small and medium-sized enterprises in Malaysia require both financial and non-financial support in order to achieve long-term business success, especially in the face of challenging and uncertain market conditions. The focus will be on helping these enterprises become more sustainable.

SMES Classification in Malaysia

Small and Medium Enterprises (SMEs) in Malaysia is classified based on the total sales generated and total number of employees. As classified by the SMECORP Malaysia, SMEs in manufacturing sector are companies with annual sales of less than RM 50 million and full-time employees of less than 200 employees, and SMEs in services and other sectors are the companies with annual sales of less than RM 20 million and full-time employees of less than 75 employees (Table 1).

Table 1

Definition of SMEs by Category

Classification	Sector		Services and Other Sectors	
	Manufacturing	Number of Employees	Annual Sales	Number of Employees
Micro	<RM 300,000	<5 people	<RM 300,000	<5 people
Small	RM 300,000 <	From 5 to < 75 people	RM 300,000 <	From 5 to < 30 people
	RM 15 million		RM 3 million	
Medium	RM 15 million <	From 75 to < 200 people	RM 3 million <	From 30 to < 75 people
	RM 50 million		RM 20 million	

Source: SME Corp. Malaysia 1

Challenges Faced by Malaysian SMES

Small and medium-sized enterprises (SMEs) in Malaysia have been facing ongoing challenges and risks due to various uncertain situations such as the COVID-19 pandemic, natural disasters, and political instability. These businesses are particularly vulnerable, especially when it comes to their finances. Currently, the main concern for SMEs is trying to navigate the uncertainties of the pandemic in the coming years. According to a survey conducted by the Small and Medium Enterprises Association (SAMENTA), 34% of SMEs saw a decrease in sales of more than 20%, 21% expect to have low-level performance, 25% are optimistic, and 30% are unsure about their performance. The turmoil caused by these events has also presented new challenges, with talent supply and cash flow becoming primary concerns for

SMEs that have had to shift to digital markets. SMEs have historically struggled to access the talent they need and to find suitable talent. In order to upskill or reskill their specialists, businesses also require funding for their resources (SME Corp Malaysia & Huawei, 2018). The high demand for digital skills can also make it difficult for employees or workers to find work if they do not continuously reskill or practice their skills. As a result, they may end up with skills that are no longer relevant or suitable for the job market.

Many small and medium-sized enterprises (SMEs) in Malaysia are experiencing a shortage of cash flow, a decrease in sales revenue, and higher operational costs. Despite the government providing short-term soft loans, SMEs may not be able to sustain their businesses unless there is an increase in demand. According to a survey, 45% of SMEs have enough cash reserves to last for two months or less, while only 20% are more optimistic and have enough to last for four to five months. Additionally, the ongoing Movement Control Order (MCO) has had a negative impact on business operations, particularly for microenterprises.

According to the Chief Executive Officer of SME Corporation Malaysia (SME Corp Malaysia), Noor Azmi Mat Said, small and medium-sized enterprises, particularly microenterprises, have limited cash flow for survival (Zainuddin, 2020). A survey found that 81% of respondents had enough cash flow to survive for a maximum of three months, and less than 1% had enough to last for more than one year. Therefore, the main concern for SMEs is to develop new business plans in order to recover more quickly. In addition to financial issues, business owners may also face challenges due to political instability.

The Impact of MCO on SMES

Due to the closure of business operations, the overall market for SMEs has weakened. The economic slowdown leads to customer payment issues and less cash flow. SMEs started looking for alternatives to create more cash flow, such as transforming their physical business operation to the digital market. Without an online presence, SMEs found themselves out of the market. The Covid-19 closure procedure emphasises social distancing and minimising the physical contact between employees and customers. This could directly effect the business performance, especially SMEs. Maintaining a proper level of cash flow is one of the main concerns for businesses to survive during the turmoil. If the business failed in generating cash flow for survival, it leads to business failure (Usahawan.com, 2020). Furthermore, businesses that struggle to create cash flow faster show slightly sudden total closure of the business because the cash flow is significant for the business to pay loans, the distributors, salaries, and suppliers. Proper cash flow management is crucial for SMEs' growth (Tahir & Ashhari, 2020).

The president of SMEs in Malaysia Michael Kang had highlighted that Malaysian SMEs had a big challenge of a tight cash flow during the Covid-19 pandemic (Tan, 2020). Despite the stimulus package and other assistance provided by the government, in the survey conducted by SME Corp Malaysia, 78 percent of respondents have yet to apply for this extraordinary relief as most of them are scared to have other financial commitments. Hence, most of them are trying alternative actions to reduce their business operational costs, such as asking their staff to utilize their annual leaves. In March 2020, the lockdown affected many businesses in different sectors worldwide. Oil prices were increasing (Meredith, 2020), the ringgit was depreciated against major currencies (FocusM, 2020), and shipping and logistics were delayed due to the improvements of Chinese economic activities during the Covid-19 Pandemic. These factors have raised the costs of raw materials and shipping for SMEs, specifically those within the manufacturing sector. Department of Statistics Malaysia (2021) had reported that

Producer Price Index (PPI) for crude materials in Malaysia increased by 7.6% and 6.3% in November and December 2020. It was 1.0% and 1.3% for intermediate supplies and materials, respectively.

SMEs Sustainability

In both developed and developing countries, SMEs play essential roles in the Gross Domestic Product (GDP). A higher rate of GDP for economic growth came from SMEs which have contributed to approximately 90% of businesses worldwide. SMEs demonstrate their capacity in providing work opportunities and reducing the unemployment rate and increase income and productivity levels nationwide. As discussed in the previous sections the impact of the Covid-19 pandemic on SMEs and the challenges faced, sustainability becomes one of the main concerns for all businesses worldwide. It also shows the need to adopt long-term survival for SMEs (Mustafa & Abbas, 2021). Sustainability is the management of social, environmental, and financial concerns to ensure responsible and ongoing success; social, environmental, and financial concerns are the main three sustainability components (Das & Dutta, 2019; Amini and Bienstock, 2014). To be sustainable, businesses, particularly SMEs, need to be more profitable and adaptable to environmental changes (Linnenluecke, 2017). In this context, the future survival and sustainability of SMEs can be ensured if they have access to sufficient resources (Fanelli et al., 2021).

Resources of SMEs and Resource-Based View (RBV)

It is worth emphasizing that business growth relies on resources that companies have. Companies without resources will not be able to achieve their business sustainability (Fanelli et al. 2021). Few studies highlighted what are the resources that companies should take account of in their business operations (Barney, 1986a, 1986b, 1991; Wernerfelt, 1984, Rumelt 1987). Daft (1983) has defined resources as the assets, capabilities, organizational processes, information, knowledge, etc which are under the control of the company. These resources enable the company to implement strategies that enhance its effectiveness and efficiency (daft, 1983). Nevertheless, research indicates that resources are measured conceptually rather than assessing them empirically in nature, or practically (Fahy, 2000; Kamasak, 2017; Galbreath & Galvin, 2008; Schriber, 2015). For example, according to Radulovich (2008), there are limited understanding among researchers on the advantages of intangible resources and how companies could acquire a competitive advantage from such resources. Moreover, there are also arguments in the literature that the majority of the studies are not specifically identifying the resources. This is proven by Wu (2008) and Lin et al. (2011) who stated that fewer studies identified particular resources and capabilities for better business outcomes. Therefore, this study is focusing more on the resource capabilities and how these resources sustain the business operations of SMEs. The study adopts Resource Based View (RBV) theory for further discussion.

RBV is considered as an "inside-out" theory for strategy development (Connor, 2002). It explains and analyses the resources of firms and understands how companies achieve sustainable competitive advantage. RBV has an internal focus on performance, which specifies companies' resources and capabilities (Barney, 1991; Wernerfelt, 1984). Also, RBV unveils that performance results and competitive advantage are from the firm-specific resources and capabilities which are difficult to use by other firms (Barney, 1986a, 1986b, 1991; Wernerfelt, 1984; Rumelt 1987). According to Barney (1991), resources and capabilities should be valuable, rare, increasing effectiveness and efficiency, imperfectly imitable, and

non-substitutable (VRIN). Besides, Madhani (2010) has added that VRIN criteria are one of the main criteria where a resource must fulfil sustainable performance and competitive advantage. Therefore, it is vital to determine the organizations' relevant resources in identifying study variables, particularly in SMEs. Morgan et al (2006) emphasized six categories of resources as crucial resources for competitive advantage: financial resources, human resources, cultural resources, relational resources, reputation resources, and informational resources. Other researchers further classified significant resources of competitive advantage into two categories: intangible resources and tangible resources. Intangible resources are human resources, innovation resources, and reputation resources. The tangible resources are financial resources, physical resources, organizational resources, and technological resources (Hitt et al., 2012; Itami and Roehl, 1987; Hall, 1992; Hall, 1993). Table 1.2 below shows the types of resources and capabilities adapted from Barney (1991); Hall (1992) as specified by (Madhani, 2010). In the same study, Madhani has emphasized that RBV stresses the importance of a firm's resources in achieving sustainable competitive advantages. In line with the discussion made by previous researchers, this study categorized the resources into tangible resources (financial resources, physical resources, organizational resources, and technological resources) and intangible resources (human resources, innovation resources, and reputation resources).

Table 2

Types of Resources and Capabilities

Tangible Resources and Capabilities	Examples
Financial	<ul style="list-style-type: none"> ● Ability to generate internal funds ● Ability to raise external capital
Physical	<ul style="list-style-type: none"> ● Location of plants, machines, offices, and their geographic locations ● Access to raw materials and distribution channels
Organizational	<ul style="list-style-type: none"> ● Possession of patents, trademarks, copyrights, and trade secrets
Technological	<ul style="list-style-type: none"> ● Formal planning, command, and control Systems ● Integrated management information systems
Intangible Resources and Capabilities	Examples
Human	<ul style="list-style-type: none"> ● Managerial talents ● Organizational culture
Innovation	<ul style="list-style-type: none"> ● Research and development (R & D) capabilities to innovate new products, processes, and services. ● Capacities for organizational innovation and change
Reputational	<ul style="list-style-type: none"> ● Perceptions of product quality, durability, and reliability among customers ● Successful product branding and positioning with a satisfied and loyal customer base. ● Reputation as a good employer. ● Reputation as a socially responsible corporate citizen.

SMES and Digitalization

Businesses are forced to reevaluate and restructure their operations due to changes caused by covid 19 pandemic (Kabadayi et al., 2020). Covid 19 pandemic also demands customers to use online platforms and adopt e-commerce as their daily needs which requires SMEs to strengthen their digital adaptation. The digital adaptation will strengthen the relationships with the existing customers. The adoption of digitalization such as Artificial Intelligence (AI), Internet of Things (IoT), E-commerce and E-payment would facilitate SMEs to organize business operations efficiently. For instance, digital transformation reduces costs, enhances profitability, delivers products and services sufficiently, access to finance and engages more with new and existing customers. SME Corp Malaysia and Huawei Malaysia conducted a study and found that applying advanced digital technologies would improve SMEs' productivity by up to 60%. Moreover, some SMEs increased by 26% in their productivity by using social media

and others increased by 27% in productivity by engaging with e-commerce (SME Corp Malaysia & Huawei, 2018). In line with the need for digitalization, the government has granted many digitalization projects for SMEs such as PENJANA Smart Automation Grant and SME Digitalization Grant. In addition, Bank Negara Malaysia has allocated RM1 billion for SMEs to support the innovation of technology (SME & Entrepreneurship Magazine, 2020). Therefore, SMEs are considered as a part of a digital economy ecosystem, innovation and transformation which can sustain their business operations now and in the future.

Based on the previous discussions, many authors have suggested adopting the new norm of digitalization. Around 2033 Malaysian SMEs were surveyed by a study entitled "Accelerating Malaysian Digital SMEs: Escaping the Computerisation Trap". This study suggested that Malaysian SMEs need to leverage the capabilities of ICT to accelerate adopting digital transformation. The study added that SMEs need to focus on three priorities: (i) having access to digital technology (ii) having literacy and knowledge on technology usage and (iii) having the ability to create and participate in the necessary digital environment. SMEs must re-engineer their businesses by concentrating on strategies, business models, infrastructures, and processes aligned with digital transformation. Moreover, few SMEs may be unable to use digital technology due to the large capital needed to invest in and the low levels of proper plans in adopting digitalization. Although this study was conducted in 2018, till present SMEs are not fully embracing digitalization as their priority to grow their businesses due to various challenges faced.

Despite the advantages delivered by the digital transformation, it engrains various challenges. For example, in 2018, the World Economic Forum ranks cyber-attacks and data fraud as the top global and environmental risks. The International Monetary Fund (IMF) has reported that digitalization, including product trading, online platforms, and other sharing segments, produces various challenges such as workforce and many other technology-related skill gaps (IMF, 2018; Smit, 2018). Some businesses were able to digitalize their business operations due to their business nature (Kabadayi et al., 2020). Yet, many companies are unable to identify the required digital competencies from their employees to fill the competency gap (Smit, 2018). This is further proven by the rapid explosion of digital technologies such as big data, blockchain, cloud computing, IoT, machine learning and mobile applications.

Other issues relevant to the digitalization that accelerates the challenges include lack of knowledge, lack of availability of qualified professionals and high limitations of advancements and developments with industry 4.0, especially in the emerging economics (Antikainen et al., 2018; Kergroach, 2017; Rajnai & Kocsis, 2017). Davies (2015) has pointed out that financial resources and other resources lead to the failure of digital change internally. Similarly, Ali (2019) has highlighted that many digital transformation journeys fail and have poor execution since it requires an abundance of time, immense cost, and highly skilled efforts.

These challenges reveal the need to consider another aspect of the development and growth of businesses and human life in general. Kankainen (2017) said that digitalization could enable us to solve fundamental issues if implemented correctly from a business perspective. Therefore, if the companies utilize their resources by integrating, gaining, reconfiguring and upgrading them to be more flexible and dynamic, they will be able to implement and use the right technologies. Besides, dynamic capabilities (DC) focuses on resources and capabilities that require updates and changes from time to time and following the changing markets. The DC process is considered as the extension of the firm's Resource-Based View (RBV) (Schilke et al., 2018), which demands that firms initiate systems that can change their services, routines, and products over time (Madhani, 2010). Due to the rapid market changes, the adaptation of

DC is crucial in gaining a competitive advantage in the global environment. For example, managers of companies are required to improve the company's capabilities to attain competitive advantages (Teece et al., 1997; Eisenhardt and Martin, 2000). Teece (2007); Teece et al (1997) stated that the global environment is rapidly changing, and companies need to be time flexible and able to use their resources and capabilities in innovative ways. Helfat et al (2007) have defined DC as the company's capacity to create, extend, or modify its resources.

In addition, DC is valuable because it can enforce businesses to integrate, build, and reconfigure the resources internally and externally to adapt to the rapid market and environmental changes (Teece and Leih, 2016). Naldi et al (2014) studied SMEs' performance in the dynamic production industry and found that seizing capabilities improves the performance of the firms effectively. Thus, DC enables the company to enhance its resources in creating strategic changes as responding to environmental uncertainties (Schilke et al., 2018). Several authors such as Teece et al (1997); Schilke et al (2018); Teece (2014); Dixon et al (2014) pointed out that DC is very crucial to provide a competitive advantage in unstable environmental conditions.

In line with this, it is crucial to be noted that having proper resources for SMEs will enhance the performance of their business operations and this will assist them in mitigating business failures for short and long-term success. Resource capabilities in turn provide crucial information to various stakeholders concerning managing their business operations effectively. Hence, dynamic resources can assist SMEs in having proactive strategies and fast responses to environmental and market forces. Having better approaches to achieving sustainability is crucial for making SMEs not only profitable but also sustainable and more stable in the market, despite the various challenges they face. This benefits all stakeholders and provides them with important information about the extent to which Malaysian SMEs need to focus on their internal resources and not rely on government support in the event of sudden changes such as the COVID-19 pandemic.

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