

**THE INFLUENCE OF STRATEGIC
IMPERATIVES ON SUSTAINABLE BUSINESS
GROWTH AMONG MANUFACTURING SMES IN
MALAYSIA**

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**THE INFLUENCE OF STRATEGIC
IMPERATIVES ON SUSTAINABLE BUSINESS
GROWTH AMONG MANUFACTURING SMES IN
MALAYSIA**

by

HU MENG KUI

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LIST OF SYMBOLS

β	Path (β) coefficients
R^2	Coefficient of determination
f^2	Effect size (structural equation modelling)
Q^2	Predictive relevance
q^2	Effect size (analysis of variance)

LIST OF ABBREVIATIONS

4IR	Fourth Industrial Revolution
ADF	Automation & Digitalisation Facility
AES	All-Economic Sector Facility
AF	Agrofood Facility
ARF	Special Relief Facility
AVE	Average Variance Extracted
CLC	Construct Level Correction
CMV	Common Method Variance
Covid-19	Coronavirus Disease
CR	Composite Reliability
CV	Convergent Validity
CVPAT	Cross-Validated Predictive Ability Test
CVR	Content Validity Ratio
DTF	Digital Transformation
EIN	Entrepreneurial Innovativeness
EPU	Economic Planning Unit
ESG	Environmental, Social, and Governance
FMM	Federation of Malaysian Manufacturers
GAS	Government Assistance
GDP	Gross Domestic Product
HRDC	Human Resource Development Corporation
HTMT	Heterotrait-monotrait ratio
ILC	Item Level Correction

Kita Prihatin	Prihatin Supplementary Initiative Package
MATRADE	Malaysia External Trade Development Corporation
MCO	Movement Control Order
MDEC	Malaysia Digital Economy Corporation
MEDAC	Ministry of Entrepreneur Development and Cooperatives
MLQ	Multifactor Leadership Questionnaire
MOSTI	Ministry of Science, Technology and Innovation
NEP	National Entrepreneurship Policy 2030
NIMP	New Industrial Master Plan 2030
OECD	Organisation for Economic Co-operation and Development
Pemerksa Plus	Strategic Programme to Empower the People and the Economy Plus
Pemerksa	Strategic Programme to Empower the People and the Economy
Pemulih	National People's Well-Being and Economic Recovery Package
Penjana	National Economic Recovery Plan
Permai	Malaysian Economic and Rakyat Protection Assistance Package
PLS	Partial Least Square
PPE	Personal and Protective Equipment
Prihatin SME+	Additional Prihatin SME Economic Stimulus Package
Prihatin	Prihatin Rakyat Economic Stimulus Package
RAM	RAM Holdings Berhad
R&D	Research and Development
RBV	Resource-Based View
SAMENTA	Small and Medium Enterprises Association of Malaysia
SBG	Sustainable Business Growth
SCM	Supply Chain Management

SEM	Structural Equation Model
SJPP	Syarikat Jaminan Pembiayaan Perniagaan
SME Corp	SME Corporation Malaysia
SME	Small and Medium Enterprises
SMITA	SME International Trade Association
TFM	Transformational Leadership
VIF	Variance Inflation Factor
VRIN	Valuable, Rare, Inimitable, and Non-substitutable
WHO	World Health Organisation

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**PENGARUH STRATEGIK IMPERATIF KE ATAS PERTUMBUHAN
PERNIAGAAN LESTARI DALAM KALANGAN PKS PEMBUATAN DI
MALAYSIA**

ABSTRAK

PKS memainkan peranan besar dalam menjana pertumbuhan ekonomi negara, mewujudkan pelbagai peluang pekerjaan, membekalkan barangan dan perkhidmatan kepada masyarakat umum, membantu membasmi kemiskinan dan merapatkan jurang ketaksamaan sosial. Di Malaysia, PKS mewakili 97.4% entiti perniagaan, menyumbang 39.1% kepada KDNK negara, menjana 48.5% peluang pekerjaan dan 12.2% nilai eksport pada tahun 2023. Sektor PKS pembuatan merupakan penyumbang utama kepada KDNK dengan 33.8% daripada nilai keseluruhan sumbangan PKS, serta membuka 45.7% peluang pekerjaan dan mencatatkan 9.0% nilai eksport. Namun, isu kekangan sumber yang kekal menjadi cabaran utama PKS telah mengakibatkan 60% pengusaha PKS mengalami kegagalan dalam tempoh lima tahun pertama perniagaan mereka. Situasi ini diburukkan lagi oleh pandemik Covid-19 yang menyaksikan penutupan sekurang-kurangnya 150,000 PKS di seluruh negara. Jika trend ini berterusan, PKS dijangka tidak mampu mengekalkan operasi yang lestari dan menguntungkan, sekaligus menggugat jangkaan ekonomi PKS untuk mencapai matlamat aspirasi di bawah pelbagai inisiatif kerajaan. Oleh itu, memandangkan pentingnya sumbangan PKS terhadap agenda ekonomi negara, PKS mesti melaksanakan langkah-langkah yang efektif untuk memantapkan daya tahannya demi menyokong perkembangan yang mampan. Dalam konteks tersebut, satu kerangka kajian telah dibina dan sebelas hipotesis telah dibangunkan berdasarkan pandangan berasaskan sumber (resource-based view atau RBV) dan penulisan ilmiah yang lepas.

Walau bagaimanapun, matlamat utama kajian ini adalah untuk mengkaji beberapa pengaruh strategik imperatif yang tertentu (transformasi kepimpinan, bantuan kerajaan, pengurusan rantaian bekalan dan transformasi digital) terhadap pertumbuhan perniagaan yang lestari, khususnya untuk PKS dalam semua sektor pembuatan di seluruh Malaysia. Bidang PKS pembuatan telah dikenal pasti sebagai populasi sasaran kerana sumbangannya yang ketara terhadap prestasi ekonomi negara. Kajian ini juga menilai kesan pengantaraan daya inovasi keusahawanan terhadap hubungan kedua-dua pembolehubah di atas. Berikutan daripada itu, kesan penyederhanaan umur dan saiz syarikat terhadap hubungan antara daya inovasi keusahawanan dan pertumbuhan perniagaan yang mampan juga telah dikaji. Satu tinjauan kuantitatif menggunakan teknik pensampelan berdasarkan kriteria tertentu (purposive sampling) yang melibatkan PKS pembuatan, tidak termasuk perusahaan mikro, telah dijalankan secara online melalui Google Forms. Sejumlah 204 PKS mengambil bahagian dalam kajian itu, dengan 188 sampel yang ditapis telah dianalisis menggunakan dua perisian statistik iaitu SPSS dan SmartPLS. Hasil analisis tersebut mendedahkan bahawa transformasi kepimpinan, pengurusan rantaian bekalan, transformasi digital dan daya inovasi keusahawanan membawa pengaruh langsung terhadap pertumbuhan perniagaan yang mampan untuk industri PKS pembuatan di Malaysia. Sebaliknya, bantuan kerajaan pula didapati tidak memberi pengaruh sedemikian. Penemuan itu juga menunjukkan bahawa daya inovasi keusahawanan telah bertindak sebagai pengantara, dengan memperkukuh hubungan antara setiap strategi imperatif dan pertumbuhan perniagaan yang mampan. Pada dasarnya, daya inovasi keusahawanan akan menguatkan impak strategik imperatif terhadap kemampuan perniagaan. Dari aspek kesan penyederhanaan umur dan saiz syarikat pula, penemuan membuktikan bahawa apabila sesuatu perniagaan itu meningkat usianya atau semakin berkembang, kedua-dua faktor

umur mahupun saiz syarikat tidak mempengaruhi hubungan antara daya inovasi keusahawanan dan pertumbuhan perniagaan yang mampan. Kesimpulannya, kajian ini memberikan sumbangan penting dari sudut teori dengan meningkatkan pemahaman tentang RBV. Selain itu, penemuan yang diperoleh mencadangkan agar PKS pembuatan menerap dan menyepadukan strategi imperatif yang telah dikenal pasti itu dengan daya inovasi keusahawanan bagi meningkatkan kecekapan operasi syarikat dan melakar pertumbuhan perniagaan yang mampan. Akhir kata, kajian ini juga sangat bermanfaat untuk membantu para penggubal dasar, penyelidik dan pakar akademik memperkukuh pengetahuan mereka tentang strategi pembangunan PKS.

THE INFLUENCE OF STRATEGIC IMPERATIVES ON SUSTAINABLE BUSINESS GROWTH AMONG MANUFACTURING SMES IN MALAYSIA

ABSTRACT

SMEs are recognised for their significant contributions to economic growth, the creation of decent jobs, the provision of public goods and services, poverty alleviation and reduced inequality. In Malaysia, they make up 97.4% of business establishments, contributing 39.1% to the nation's GDP, 48.5% to employment and 12.2% to exports in 2023. Conversely, manufacturing SMEs accounted for 33.8% of SME contribution to GDP, 45.7% to employment and 9.0% to total exports. Due to the nature of SMEs, which are resource-constrained, approximately 60% of SMEs experience failure within the first five years of business establishment. Moreover, the Covid-19 pandemic exacerbated the failure rate, resulting in the closure of at least 150,000 SMEs. If this trend continues, SMEs cannot operate profitably and sustainably. In this regard, the economic expectations of SMEs to deliver the aspirational goals under various governmental initiatives will be impacted. Therefore, given their importance to the country's economic agenda, SMEs must uncover effective measures to enhance their resilience, enabling them to grow sustainably. Against this background, a research framework and eleven hypotheses were conceptualised and developed based on the resource-based view (RBV) and past literature. Conversely, the primary aim of this study is to investigate the influences of identified strategic imperatives (transformational leadership, government assistance, supply chain management and digital transformation) on sustainable business growth, specifically for SMEs involved in all manufacturing sectors across all states in Malaysia. Manufacturing SMEs are identified as the target population due to their

significant contribution to the nation's economy. Furthermore, the mediating effects of entrepreneurial innovativeness are tested on the relationships between these variables. Consequently, the moderating effects of firm age and size on the relationship between entrepreneurial innovativeness and sustainable business growth are also analysed. A quantitative survey using a purposive technique involving manufacturing SMEs, excluding micro-enterprises, was carried out through online Google Forms. A total of 204 SMEs participated in this study, where 188 post-filtered samples were used for analysis. The data was analysed using two specific statistical software, SPSS and SmartPLS. The data analyses reveal that transformational leadership, supply chain management, digital transformation and entrepreneurial innovativeness directly influence sustainable business growth for manufacturing SMEs in Malaysia. However, government assistance does not indicate such an influence on sustainable business growth. A further investigation reveals that entrepreneurial innovativeness mediates the relationships between each strategic imperative and sustainable business growth. In essence, entrepreneurial innovativeness enhances the effects of the strategic imperatives on sustainable business growth. Regarding the moderating effects of firm age and size, the results reveal that both moderators do not influence the relationship between entrepreneurial innovativeness and sustainable business growth as they grow older or more extensive. In conclusion, this study has delivered answers to its research questions through the conceptualisation and testing of an integrative framework drawing on RBV. From the statistical analysis, eight of the eleven hypotheses were supported. Moreover, the findings of this study are valuable and beneficial to practitioners, policymakers, researchers and academicians who wish to apprehend the predictors of sustainable business growth among manufacturing SMEs in Malaysia.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

SMEs are widely recognised for their significant contributions to economic growth, the creation of decent jobs, the provision of public goods and services, poverty alleviation and reduced inequality. They comprise a substantial share of private sector entities in developed and developing countries. Surveys by the Asian Development Bank indicate that SMEs account for 98% of all enterprises and employ 66% of the workforce in Asia (ADB, 2014). They collectively contribute from about 17% to the national gross domestic product (GDP) in low-income countries, including India, to between 40% and 50% in higher-income countries, such as Malaysia and Singapore. Furthermore, SMEs contribute significant exports and facilitate income growth while providing fertile ground for enterprise development (UNESCAP, 2022). However, most SMEs operate with limited resources, resulting in many failing to overcome some of the critical challenges faced. These shortcomings were not new to SMEs, though. Many SMEs faced numerous stumbling blocks preventing them from progression. Nevertheless, the COVID-19 pandemic that started in 2020 exacerbated the impact on most SMEs, affecting even larger businesses.

Based on the World Health Organisation's statistics as of 13th October 2024, the pandemic has affected about 776 million, with seven million deaths worldwide (WHO, 2024). The world faced numerous socioeconomic challenges, impacting people's lives and livelihoods and causing severe damage to businesses during the pandemic from March 2020 to May 2023. When nations worldwide implemented strict containment measures to curb the spread of the pandemic, the global supply chain was severely disrupted. Consequently, various economic activities were halted, causing

businesses and people worldwide numerous difficulties. As a result, the world trade merchandise trade declined by 5.1%, accompanied by a global GDP contraction of 3.3% in 2020. Nevertheless, the volume of world merchandise trade rebounded by 2.7% in 2022 but was expected to slow down to 1.7% in 2023 due to negative spillovers from the Ukraine war, high inflation, tighter monetary policy and financial market uncertainty. Trade growth was somehow projected to rebound in 2024 as the world GDP is estimated to grow by 2.6% (WTO, 2023).

Closer to home in Malaysia, SMEs are equally crucial to the nation. They form the backbone of the economy, representing 97.4% of the overall business establishments in 2023. The majority of SMEs are actively involved in the services sector (84.7%), followed by construction (8.0%), manufacturing (5.6%), agriculture (1.4%) and mining and quarrying (0.4%) (SME Corp, 2023). In terms of economic contributions, they contributed 39.1% to the nation's GDP, 48.5% to employment and 12.2% to exports in 2022 (DOSM, 2024). Notably, SMEs are important drivers of the Malaysian economy. Like their counterparts elsewhere, many Malaysian SMEs were not spared from the severe impact of the pandemic. The containment measures implemented by the government to curb the spread of the disease indirectly created numerous challenges for businesses. That being said, many SMEs faced business failures during the pandemic.

Based on the Companies Commission of Malaysia statistics, 50,269 SMEs folded between March 2020 and November 2020. This number represents about 5.5% of more than 907,000 SMEs in the country (Huong, 2020). Separately, the Small and Medium Enterprises Association of Malaysia (SAMENTA) estimated that at least 150,000 SMEs had shut down by mid-2021, resulting in 1.2 million job losses since the pandemic broke out in early 2020 (Chew, 2021). By and large, the pandemic has

severely impacted SMEs, making them unable to sustain their business operations. With respect to challenges caused by the pandemic, the manufacturing SMEs, in particular, cited rising operating costs as a primary concern in keeping their business afloat. This was consistent with the surge in the price of primary raw materials following a commodity upcycle and a rise in international shipping costs amid supply bottlenecks (Woon, 2021).

Seeing the need to cushion the impact of the Covid-19 pandemic on people and businesses, the Malaysian government implemented eight economic stimulus packages totalling RM530 billion in 2020, representing a significant 38% of the national GDP for that year. The stimulus packages, comprising various tactical intervention components, aimed to assist businesses, particularly SMEs, to remain sustainable during the pandemic. More than ever, SMEs viewed these stimulus packages optimistically and complimented them as one of the best government strategies (Lim et al., 2021).

Despite the swift governmental responses, the Malaysian economy was severely impacted in 2020, where GDP contracted by 5.6% from a growth of 4.4% in the preceding year (DOSM, 2021). All the five main economic sectors being measured, namely services, manufacturing, agriculture, mining and quarrying, and construction, registered a contraction parallel with a highly challenging domestic operating environment and lower global demand. In essence, the pandemic has reaffirmed the vulnerability of business enterprises to the crisis, particularly SMEs that are resource-constrained. In its survey on SMEs in Malaysia, conducted online between 10th April 2020 and 1st May 2020, the Department of Statistics Malaysia revealed that 67.8% of the respondents did not capture any sales during the complete lockdown period. Some 42.5% of respondents reckoned that the business would take at least six months to

recover from the pandemic. Another 28.7% take between 4-6 months (DOSM, 2020). These responses reflect SMEs' deep entanglements in sustaining their business operations and remain relevant during a crisis.

Ironically, the Covid-19 pandemic is a potent reminder of SME vulnerability amid the changing economic landscape and business challenges. In fact, business challenges are not new to SMEs. Many SMEs already faced numerous challenges before the pandemic. Forging ahead, SMEs will find it difficult to stay afloat, not to mention grow sustainably, without adequate guidance. The government can only do so much to assist SMEs in strengthening their performances.

Conversely, more needs to be done by SMEs themselves. In this context, SMEs must take the initiative to improve their competencies and competitiveness in raising their level of performance. To succeed, they must identify the correct formulas to raise their game plan, enabling them to deliver what is expected of them, more so the strategic initiatives set by the government under the various new economic frameworks. Besides leveraging government assistance, what else must SMEs in Malaysia do to improve their business resilience and competitiveness in sustaining business growth? What would be the strategic imperatives SMEs need to adopt in attaining sustainable business growth? What other critical factors would influence the effectiveness of these strategic imperatives? Forging ahead, these vital questions become the fundamental cause, leading to this study's primary intent of investigating the significance of relevant strategic imperatives, the related mediator and moderators in driving SMEs in Malaysia, specifically those involved in the manufacturing sector, to grow their business sustainably. Conversely, these primary objectives form the basis of this study: to explore and test the relationships between the identified strategic imperatives and sustainable business growth. The findings of this study provide

valuable guidance to SMEs in driving their business forward. Furthermore, the findings also expand theoretical contribution to SME development, enabling policymakers to apply them in policy settings. Academia and researchers specialising in SME areas of study can expand further on this study to meet other related research objectives in the future.

1.1.1 Vulnerability of Malaysian SME

Arguably, the pandemic has exposed SMEs' vulnerability, resulting in many business failures. The sudden changes in the business environment severely hit the resource-constraint SMEs that scaled down their operations to keep the costs low and stay afloat. Conversely, increasing uncertainty and intense global competition amplified the challenges and risks to SMEs for sustainable growth. The global economic downturn and burgeoning trade conflicts caused SMEs to face enormous challenges and risks to compete for survival and sustainable growth due to a lack of internal and external resources in a turbulent market (Wang et al., 2019).

In essence, business failures do not augur well for SMEs as the effect of business failure can be relentless, resulting in financial loss and psychological impact (Ucbasaran et al., 2013). The eroded financial position significantly affects SMEs in their pursuit of recovering their business operations. A special survey on the effects COVID-19 has on companies in Malaysia revealed that some 69.8% of survey respondents relied on internal funds and another 11.3% on fresh capital injections to stay afloat in business during the pandemic (DOSM, 2020). Figure 1.1 (p. 6) denotes the effects of the COVID-19 pandemic on business enterprises in Malaysia.

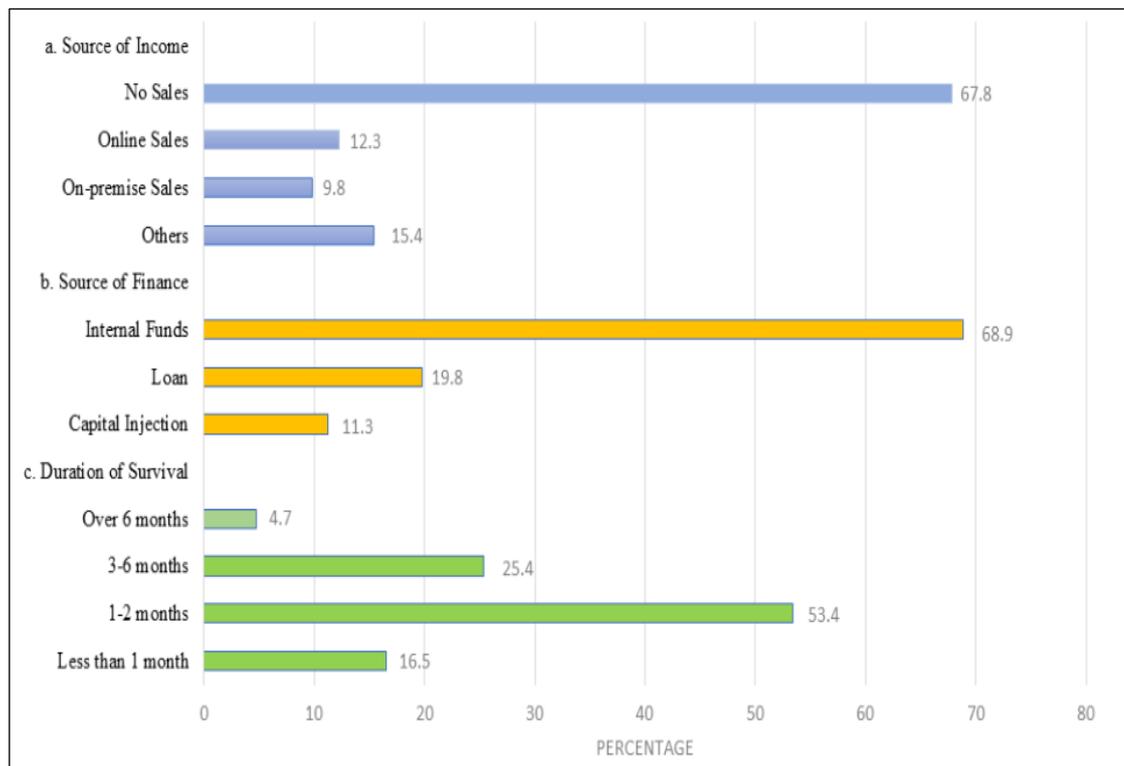


Figure 1.1 Effects of Covid-19 on Business Enterprises in Malaysia – Survey Period: 10 April 2020 – 1 May 2020

Source. Department of Statistics Malaysia (2020)

Notably, it is widely known that business challenges are not new to SMEs. In fact, SME business performances have been impacted by various challenges long before the Covid-19 pandemic, which exaggerated the percussion on SMEs. Based on previous studies, many SMEs failed within the first five years of business establishment, with a 60% failure rate (Ahmad & Seet, 2009; Wong et al., 2013). Therefore, it is inaccurate to put full blame on the pandemic for issues faced by SMEs. Ironically, the pandemic has aggravated the SMEs' already frail resilience and competencies.

Nevertheless, the pandemic has further weakened the vulnerable SME organisational structures. Fortunately, as the nation transitioned to endemicity, the economic momentum in Malaysia started to rebound, registering an economic growth

of 3.1% in 2021 (DOSM, 2022b) and 8.7% in 2022 (MOF, 2023). The growth was driven mainly by the manufacturing, services, mining and quarrying sectors. However, the real GDP in 2023 only grew by 3.7% due to the slowdown in the global economy and inflationary pressures domestically (BNM, 2024). Nevertheless, the economy is on track to exceed the national growth target of 4.0% to 5.0% on the back of a steady recovery in key sectors like construction, manufacturing, services, and tourism (The Star, 2024). Although the pandemic started to improve in 2022, SMEs continue to face numerous challenges to rebuild their businesses, more so in achieving sustainable growth. Considering the shortcomings of SMEs in driving their business growth, and if they continue to operate with such drawbacks, they will not be able to deliver what the government expected them to achieve. To realise the vision of the Madani Economy, SMEs must prevail and transform to become more resilient, innovative and competent. Recognising the significance of economic contributions, SMEs are expected to expand their presence and play a significant role in the global market, as highlighted in the Madani Economy framework. This framework will spur the economy and drive greater business growth, including that of SMEs (The Star, 2023c).

In addition, the New Industrial Master Plan 2030 (NIMP), which is a key component of the Madani Economy, aims to revitalise the manufacturing sector and drive Malaysia's trajectory as a global leader in industrial development. In short, the NIMP can transform Malaysia into a high-tech nation in seven years, from 2023 to 2030, requiring a total investment of RM95 billion. SMEs, particularly those in the manufacturing sector, can leverage the opportunities to position themselves higher in the global value chains and scale up into mid-tier companies (Ibrahim, 2023b). To succeed, SMEs must strengthen their position to excel in the global supply chain and internationalisation. Taking a step forward, SMEs must identify and reaffirm the

primary imperatives that can enhance their business resilience, enabling them to strive for sustainable business growth.

1.1.2 Significance of Sustainable SME Growth

The significance of sustainable growth for SMEs cannot be overstated, as the repercussions of their failures extend beyond individual business challenges to impact the broader landscape of SMEs and economic development in the country. Moreover, as the sustainability of SMEs becomes more important, it can create a direct impact on the attainment of strategic objectives outlined in the National Entrepreneurship Policy 2030 (NEP). The potential failure of SMEs poses a tangible threat to the realisation of strategic goals embedded in the NEP. In sum, the NEP aims to (1) raise SME contribution to the nation's GDP from 37.4% in 2018 to 45% by 2025 and 50% by 2030, (2) increase SME employment from 66.2% in 2018 to 72% by 2025 and 80% by 2030, and (3) improve SME export contribution from 17.5% in 2018 to 25% by 2025 and 30% by 2030. Therefore, SMEs in Malaysia must continue to grow sustainably in ensuring the attainment of the targets set under the NEP. Figure 1.2 (p. 9) illustrates SMEs' medium and long-term targets for 2025 and 2030.

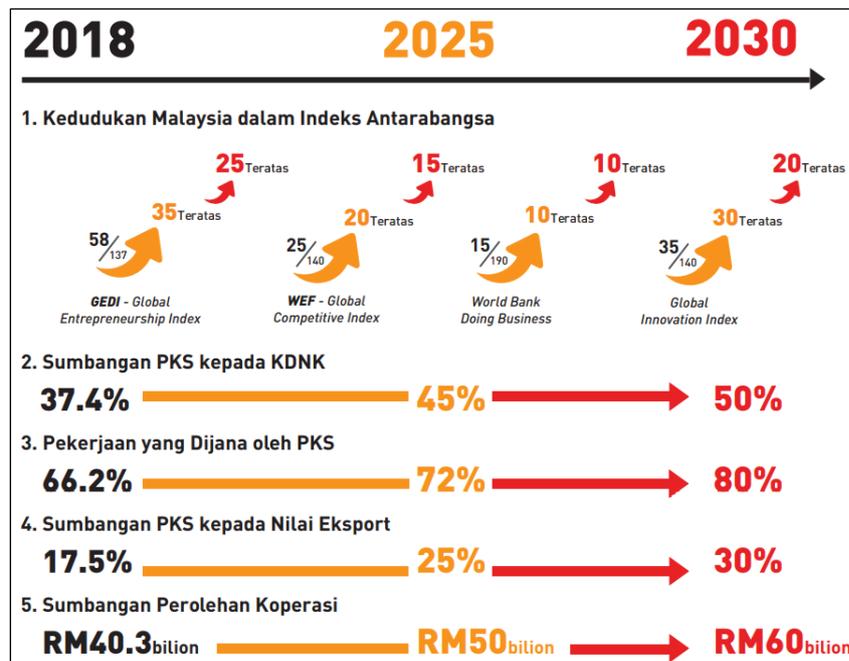


Figure 1.2 Summary of Targets for National Entrepreneurship Policy 2030

Source. National Entrepreneurship Policy (2030)

In addition to NEP, the Madani Economy framework and NIMP also aim to reinforce the priorities on SME development, enabling SMEs to expand significantly in the global supply chain and be successful in the international business arena. Under the Madani Economy framework, the government has committed to extending necessary guidance and assistance to SMEs, enabling them to internationalise their operations (Ibrahim, 2023a). Madani Economy aims to reform and stimulate the economy for sustainable growth, making Malaysia a prominent leader in the Asian economy. The economic framework also encourages investment and strengthens local industries, specifically SMEs, to become more innovative and competitive in the global market. Conversely, the framework stresses grooming SMEs into international companies. The financial market will also be reformed, encouraging more companies, including SMEs, to raise funding through public listing exercises. In essence, SMEs are accorded the privileged focus in driving the nation's growth under the new economic

framework. Arguably, the provision of government assistance is attributed to the realisation and acknowledgement of various challenges SMEs face in growing their business.

Although the government has implemented various measures to assist SMEs in business recovery, the process can be challenging. The acute shortage of more than 1.2 million foreign workers directly impacts different business sectors nationwide (Pandiyani, 2021). This situation has compounded the challenges manufacturing SMEs face in the recovery path. Forging ahead, SMEs must explore new and dynamic ways of charging their business more progressively towards the directions set by the government under the Madani Economy framework, NIMP and NEP initiatives. Given the significant contribution, the Malaysian government places substantial emphasis on SME development and will continue to put sufficient focus on assisting SMEs to recapture their business momentum and growth (The Star, 2023a). As the economy recovers from the effects of the pandemic, rising costs, reduced revenue and maintaining profitability are among the most significant challenges SMEs face. The uncertain business environment will continue challenging Malaysian SMEs that remain vulnerable in their business recovery process. According to the Business Confidence Index (BCI) survey for the first quarter of 2022 by RAM Holdings Bhd and CTOS Data Systems Sdn Bhd, around 55% of respondents have yet to recover to pre-pandemic levels, particularly SMEs (60%). Most respondents foresee full recovery only in 2023 (Hani, 2022). Arguably, the pandemic became the trigger in accelerating changes among SMEs. Considering its significance to the nation's economy, the government has continuously implemented various assistance to help SMEs recover from the pandemic. However, the extent of government relief is inadequate. Therefore,

SMEs must find ways to enhance productivity and efficiency by uncovering new solutions to sustain their business growth as they forge ahead in the new era.

1.1.3 The Essence of Manufacturing SMEs

Broadly, SMEs are involved in four primary sectors: services (84.7%), construction (8.0%), manufacturing (5.6%), agriculture (1.4%) and mining and quarrying (0.4%) (SME Corp, 2023). Although manufacturing SMEs do not represent the largest group in terms of establishment, they play a critical role in economic contribution. Manufactured goods make up 84.2% of Malaysia's total exports in 2022, where electrical and electronic products held the biggest share of 38.2% (Tan, 2023). In terms of SME contributions to the economy, the manufacturing sector contributed significantly across all economic indicators, namely GDP, employment and exports. In 2023, manufacturing SMEs accounted for 33.8% of total SME contribution to the national GDP, 45.7% of total SME employment, and 9.0% of total exports in Malaysia (2022: 33.8%, 45.9% and 8.3%) (DOSM, 2022a & 2023b 2024). The significant SME contributions indicate the profound importance of SMEs in driving economic expansion in Malaysia. Figure 1.3 (p. 12) illustrates SME distribution by sectors across the primary economic indicators: GDP, employment, and export from 2021 to 2023.

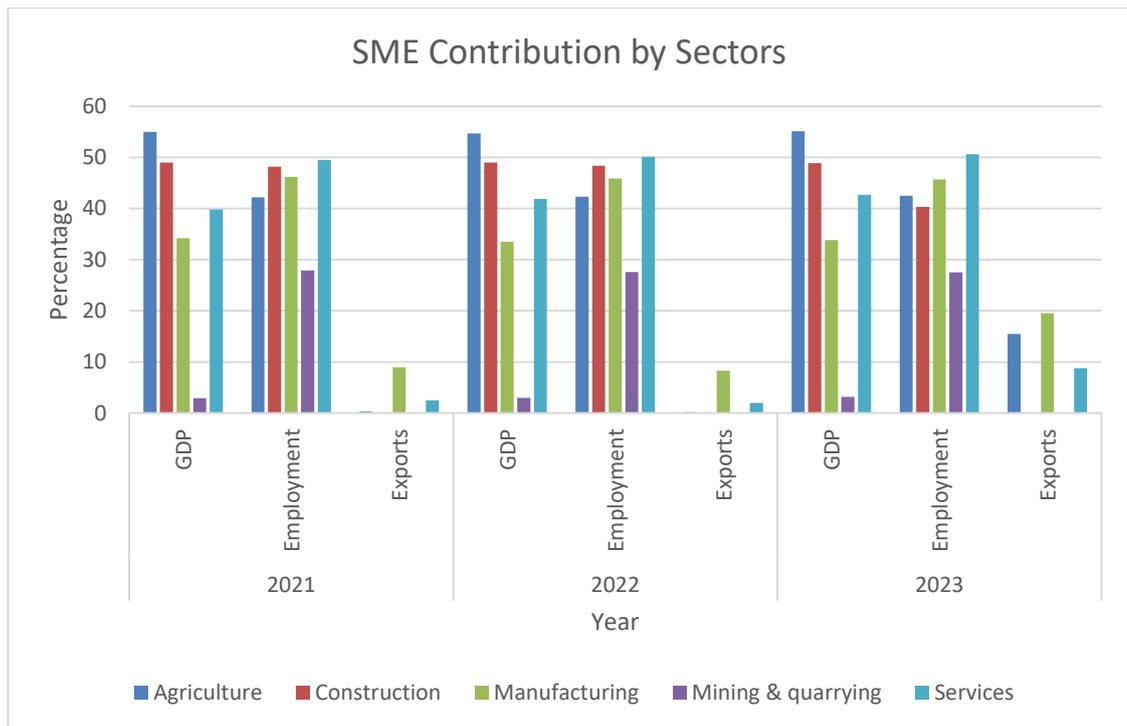


Figure 1.3 SME Contribution by Sectors Across Primary Economic Indicators

Source. Department of Statistics Malaysia (2022-2024)

In the context of manufacturing SMEs, their contributions to the nation's economy were relatively stagnant in the last three years, mainly attributed to the impact of the pandemic. For comparison, the contribution rates of GDP and employment in 2023 were lower than the pre-pandemic level in 2019. Nevertheless, the export indicator improved slightly in 2023. This reflects the vulnerability of manufacturing SMEs during a crisis due to limited resources. Figure 1.4 (p. 13) shows the consistent contributions of manufacturing across the three primary economic indicators over the last five years.

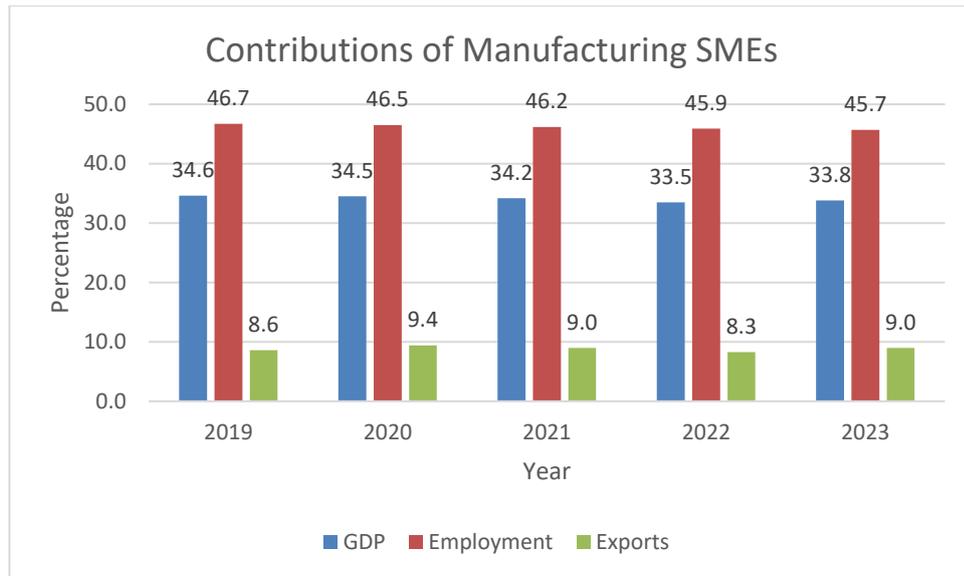


Figure 1.4 Manufacturing SME's Contributions to Primary Economic Indicators

Source. Department of Statistics Malaysia (2020 – 2024)

Despite the steadfast contribution rates of manufacturing SMEs over the last five years partly due to the pandemic impact, they are critical for the Malaysian economy. Their performance is essential for Malaysia to achieve the aspirational targets for overall SMEs under the NEP by 2030, particularly contribution to GDP of 50% and contribution to exports of 30%. In the recently launched Madani Economy framework and NIMP, SMEs will be given the necessary assistance to expand their global supply chain and be successful in the international market. In other words, the government is fully aware of the SMEs' need to enhance their resilience and capabilities in leveraging opportunities for business growth.

Ironically, NIMP focuses on propelling the manufacturing sector to the next development level. Manufacturing is prioritised because investments in the sector will have a higher multiplier effect in driving growth relative to other sectors. Therefore, there is a need to build up the whole supply chain and ecosystem, both vertically and horizontally, to drive meaningful industrial transformations (RAM, 2023). Consequently, the government will intensify its effort to nurture SMEs and enhance

their resilience, enabling them to move up the manufacturing value chain (Aman, 2023a). Forging ahead, manufacturing SMEs will continue to play a critical role in the nation's economy, hence the reason for focusing on manufacturing SMEs in this study. In this study, the manufacturing SMEs are chosen as the target investigation due to their significant contributions to the Malaysian economy.

1.1.4 Strategic Imperatives for Sustainable Business Growth

By and large, the Malaysian government has been committed to helping SMEs weather challenges amid the pandemic (Malay Mail, 2020). Based on the economic policies in the Madani Economy framework, NEP and NIMP, the government will continue to develop and support SMEs to become more successful. Despite the numerous assistance provided by the government, many SMEs in Malaysia are unaware of such incentives (BNM, 2018; Vaghefi & Yap, 2021). Many SMEs are also confused and unsure of how to apply for such government assistance, comprising over 240 programmes offered through over 80 agencies in Malaysia (Barrock, 2023). This concerns the government because, with such ignorance, SMEs will be left behind in economic development. Moving forward, it is crucial for SMEs to grasp sustainability requirements as new regulations emerge. They must also understand how to access government funds and incentives (Poon, 2024).

While it is true that SMEs have not leveraged enough government assistance to drive business growth, their performance could be better if they manage to do more with such government assistance. In simple terms, SMEs need to do more to remain relevant and sustainable. Therefore, SMEs must find effective ways to sustain their business and achieve success by identifying the factors they are lacking. Implementing strategic planning and management in business tends to significantly embrace strategic planning to enhance their business performance and growth, positively impacting the

SME's success (Lim & Teoh, 2021). They must strengthen their business resilience by improving operational excellence in handling future challenges. They need to identify and embrace other primary strategic imperatives to strengthen their overall business, enabling sustainable business growth. Therefore, the present study examines if government assistance can practically influence SMEs towards sustainable business growth. Moreover, this study also examines if another mediating factor further enhances the effect of government assistance.

In addition to the economic stimulus packages, the government is promoting and encouraging SMEs to increase their intensity and integration of digital and automation in lifting their business performance to the next level. The strategic measures and goals for digitalisation for SMEs are stipulated in the National Fourth Industrial Revolution (4IR) Policy (MITI, 2018) and Malaysia Digital Economy Blueprint (EPU, 2021). By connecting SMEs with multinational and large local companies, SMEs can become competitive global manufacturers and suppliers. To achieve this, SMEs must stay abreast of the rapid technological changes globally, particularly with the Industry 4.0 revolution (Chong, 2023). Based on the strategic objectives of both policy and blueprint, the government fully recognises the dynamic of digitalisation, which will help companies achieve sustainable growth in the long term.

Learning from the pandemic, Hu and Kee (2021d) reiterate the urgency for SMEs to address the critical issues impacting their business operation, relating to the business's financial health, people and productivity. The answer to many of these issues lies in embracing digitalisation to elevate operational efficiency. Cost pressure, market volatility and technological disruptions are necessitating SMEs to undergo a digital transformation to stay competitive and resilient. Conversely, intelligent

automation and insight-driven technologies such as robotic process automation and analytics support and enable new ways of doing work (Branded, 2023). Moreover, Yap (2024) reckons that SMEs must seize the opportunity to embrace technological integration and innovation to advance to the next level of digitalisation and automate business processes. This strategic move can significantly drive SMEs for growth and sustainability in the rapidly evolving business landscape. Regrettably, Malaysian businesses, particularly SMEs, were underperforming in their digitalisation efforts compared to most of their regional peers in Thailand, the Philippines, Vietnam, and Singapore.

Around 77% of SMEs in Malaysia remain at the bare digitalisation stage. For those that have adopted technologies, only a small minority explored frontier technologies like data analytics (6.3%). Many SMEs are still ill-equipped to transition towards digitalisation (SME Corp, 2021). Conversely, technology adoption and digital transformation topped the list for coping strategies, demonstrating the vital need for SMEs to begin thinking of digital technologies' inevitable role in modern business survival and continuity (Erdiaw-Kwasie et al., 2023). Accordingly, SMEs need to embrace digital technology to sharpen their internal processes and control, enabling them to raise operational efficiency. In this regard, the present study investigates the influence of digital transformation in driving sustainable business growth among manufacturing SMEs in Malaysia. It also examines the extent of the influence of a mediating factor between digital transformation and sustainable business growth.

Hu (2022b) added the critical need for SMEs to realign their supply chain management with the changing landscape of supply chain processes, hence braving themselves to attempt new approaches to mitigating the supply chain woes. During the pandemic, the sudden shifts in market conditions and unforeseen disruptions have

pushed many promising SMEs to the brink of failure and caused numerous adverse consequences for a production's supply chain, encompassing suppliers, customers, employees and the surrounding communities. Forging ahead, it is crucial for SMEs to strengthen their supply chain management, enabling them to capitalise on the shifting supply chains in the domestic market and ASEAN region (The Star, 2023d). Recognising the importance of supply chain management for SMEs, the Malaysian government will continue to nurture and support SMEs to penetrate the global supply chain and create a pool of suppliers that can generate or add value to the economy. In this sense, collaborations with multinational corporations (MNCs) are a crucial factor in enabling the internationalisation efforts of SMEs, empowering them to expand their presence and play a significant role in the global market. To achieve this, a collective commitment from all stakeholders is needed to improve the overall business environment and strengthen the presence of SMEs in global value chains (Chong, 2023). Therefore, SMEs must raise their competency in supply chain management towards sustainable growth. It is based on its significance to enhance the overall operational efficiencies of SMEs that supply chain management is included as one of the strategic imperatives for this study.

As in most businesses, effective change starts from the top; outstanding leadership is critical to manoeuvring the business into a new direction. Organisational change is inevitable and essential for businesses to strengthen their overall business operating model for sustainable growth. Conversely, leadership becomes more critical to businesses during a crisis like the Covid-19 pandemic. Thus, Bank Islam Malaysia Bhd's Chief Economist Mohd Afzanizam Abdul Rashid commented that most SMEs struggled during the pandemic due to market uncertainties. More than ever, leadership has become critical for SMEs to face and respond swiftly to changes. Apart from

digitalisation and technological adoption, SMEs must be open to diversifying their revenue stream by exploring other opportunities so that they will not be overly dependent on one revenue source (MIDA, 2021). Moreover, SME leaders must recognise that adaptation to change is not optional if they want to avoid being left behind. They must focus on developing talents, specifically in AI, enabling them to rebuild and redefine their businesses to align with technological advancements (Bernama, 2024). In essence, leadership is fundamental in translating sustainability visions into action. Leaders must anticipate and evaluate long-term sustainability trends, spot new opportunities and develop strategies to reposition the organisation if and when necessary (Lueneburger & Goleman, 2010). In this sense, growth businesses need visionary leaders who are willing to accept risk and have the creative drive to pursue innovation (Perrott, 2015).

In the current business environment tainted by geopolitical and economic uncertainties, transformational leadership can hold together essential resources through people and work engagement in stabilising and lifting business performance (Hu & Kee, 2021a). Essentially, transformational leadership engages the higher innovative work behaviour of the employees through trust in leaders and work engagement (Li et al., 2019). Moreover, innovativeness and creativity have been found to be psychological characteristics that can be essential elements of entrepreneurial success (Lueneburger & Goleman, 2010).

The above descriptions rationalise and justify the inclusion of transformational leadership, government assistance, supply chain management and digital transformation as the strategic imperatives for this study. The influence of these strategic imperatives on SMEs' sustainable business growth is investigated in this study. In addition, this study identifies the mediating role of entrepreneurial

innovativeness in the above relationships. Furthermore, this study also determines if firm age and size matter in the relationship between entrepreneurial innovativeness and sustainable business growth among manufacturing SMEs in Malaysia.

1.2 Problem Statement

In Malaysia, SMEs form the backbone of the economic landscape, constituting over 97% of all businesses. SMEs contribute significantly, accounting for more than 38% of the nation's GDP and employing 48.2% of the workforce. These compelling statistics reveal the important role of SMEs in advancing our nation's sustainability agenda. As SMEs increasingly become integral parts of supply chains, there is a growing call for SMEs to incorporate environmental, social, and governance (ESG) considerations into their business practices (Hashim, 2023). The pressure to embrace sustainability is intensified by the expectations of customers and suppliers, elevating the business case for sustainable operations to unprecedented levels.

The call for SMEs to demonstrate greater environmental stewardship and social responsibility is gaining momentum, emphasising the evolving landscape where sustainable business practices are no longer optional but essential. This trend is further reinforced by the recent announcement of the Madani Economy, which highlights that Budget 2023 and the Madani Economy framework will spur the economy and drive more significant sustainable industry growth, including bolstering the well-being of SMEs (Aman, 2023b). In this context, incorporating ESG principles into their business operations becomes a non-negotiable aspect for SMEs aspiring to embrace internationalisation.

Recognising the important role of SMEs, the Malaysian capital market emerges as a central platform to facilitate SMEs' transition towards the implementation of

sustainable practices. This strategic emphasis on sustainability not only aligns with global expectations but also positions SMEs to thrive in an environment where responsible business practices are integral to long-term success and international competitiveness. Therefore, the Malaysian government has called on banks to extend loan repayment assistance to SMEs experiencing financial challenges (The Star, 2023b). By actively supporting SMEs through such measures, the government aims to contribute to the sustainable business growth of SMEs in the country. Establishing a solid approach is necessary to enable SMEs in Malaysia to become more resilient and sustainable, ensuring profitable operations over an extended period.

The acknowledged vulnerability of SMEs due to limited resources highlights a pressing concern for Malaysia - ensuring sustainable performance to drive progressive economic growth. Existing studies reveal a sobering reality, indicating that SMEs experience a substantial 60% failure rate within the initial five years of establishment (Ahmad & Seet, 2009; Wong et al., 2013). The primary culprits behind this alarming trend are identified as inadequate strategic planning and a deficiency in essential management skills (Kaur, 2017). Many SMEs overlook the significance of strategic planning, adversely affecting their business performance. In addition, the absence of entrepreneurs' personality traits is also a primary factor leading to SME failure (Halim et al., 2014; Lim & Teoh, 2021).

The significance of sustainable business growth for SMEs in Malaysia is highlighted by the challenges they faced during the Covid-19 pandemic. The pandemic compelled many SMEs to cease operations, leading to the collapse of a substantial number, estimated at 150,000 by SAMENTA (Chew, 2021). This situation raises concerns about the sustainable business growth of SMEs. The collapse of numerous SMEs during the pandemic indicates a vulnerability that, if not promptly addressed,

can jeopardise the achievement of aspirational goals outlined in frameworks such as the Madani Economy, NIMP and NEP.

The ability of SMEs to navigate changes is often contingent on bold and rapid decisions from top leadership. The success or failure of change management processes is closely tied to the chosen leadership style (Bhagat et al., 2021). Notably, surviving SMEs attribute their success to proactive business leaders, particularly those embracing transformational leadership styles, who rise above challenges in times of crisis (Hu & Kee, 2021a). Transformational leadership is unique in its emphasis on people engagement through active learning, effective communication, process improvement, and stimulation of worker cooperation (Para-González et al., 2018). Past literature supports this, indicating that transformational leadership has a significantly positive impact on the success of SMEs (Arshad et al., 2016; Ng & Kee, 2018; Ng et al., 2016). Conversely, transformational leaders can facilitate smooth changes in individuals and organisational structures. Therefore, the influence of transformational leadership on sustainable business growth for manufacturing SMEs is investigated as one of the strategic imperatives in this study.

In response to the challenges faced by SMEs, the SME Association of Malaysia (SME Malaysia) has urged the government to allocate RM40 billion in loans for SMEs (Aman, 2023b). This form of financing is seen as crucial to assist SMEs with tight cash flow in advancing their operations. Furthermore, SME Malaysia's national president, Mr. Ding Hong Sing (2022 – 2024), called for one-to-one matching grants totalling RM2 billion specifically dedicated to ESG projects for SMEs. He expressed the belief that such incentives from the government would accelerate spending by SMEs in ESG initiatives, particularly among manufacturing sectors (Khoo, 2023).

Conspicuously, the influence of government assistance on sustainable business growth for manufacturing SMEs is investigated in this study.

Due to vulnerability, SMEs were also severely impacted by the supply chain disruption, resulting in failures to deliver goods to customers during the pandemic. Many were caught unprepared by the sudden halt of economic activities globally. With the economy reopening, a combination of cost-driven factors, namely the pandemic-inflicted supply chain disruptions and supply constrictions, inflated shipping and logistics costs, the rising cost of raw materials, higher energy costs and commodity prices, weak domestic currency, as well as a shortage of workers, have weighed on businesses' production and costs; and squeezed margins as well as threatened the profitability of companies (The Edge Malaysia, 2022). SMEs continue to face escalating input costs arising from supply chain disruptions, affecting the business recovery process (Lim, 2022). As SMEs expand their business, the risks affecting the success of supply chain integration increase accordingly (Weingarten et al., 2016). The main constraints relate to escalating costs of raw materials, important data sharing and demand variation due to the seasonality factor. Moreover, a lack of technology adoption and finance scarcity for proper implementation of supply chain management can further strain SMEs in managing their supply chain (Pradhan & Routroy, 2014). To succeed and remain sustainable, SMEs must adopt dynamic supply chain management as part of their core business functions (Jabbour et al., 2020; Muhamed et al., 2020). By strengthening supply chain management, SMEs can enhance their business performance (Arawati, 2011). Given this, the influence of supply chain management on SME sustainable business growth for manufacturing SMEs is investigated in this study.

SME Malaysia's national president, Mr. Ding Hong Sing, emphasises that the transformation of SMEs in tandem with Industrial Revolution 4.0 necessitates the urgent adoption of automation and digitalisation. These advancements represent significant capital outlays for many businesses. Mr. Ding Hong Sing further highlights that the existing SME grants are insufficient to cover a large number of businesses in the country. Therefore, the association suggests increasing the grant size for automation, digitalisation, and smart farming to RM2 billion. He said sustained initiatives and the effective execution of incentive programs in digitalisation, reskilling, and upskilling constitute the primary impetus behind bolstering business capacities (Aman, 2023b).

About 77% of SMEs in Malaysia remain at the basic digitalisation stage, with only 6.3% exploring frontier technologies (SME Corp, 2021). In essence, when implemented effectively, digital transformation can help SMEs compete successfully in the dynamic business environment (Tham & Atan, 2021). Khin and Ho (2019) reiterate that digital transformation has positively affected Malaysian SMEs' financial and non-financial performance, enabling them to attain sustainable business growth. However, the Business Survey Report 2021, compiled by the Associated Chinese Chambers of Commerce and Industry of Malaysia (ACCCIM) found that only 16% of SMEs have strong digital capabilities. While 50% use technology to assess relevant data to improve decision-making, only 25% have access to reliable and timely information. More than 50% have not planned to upskill their digital capabilities, and only 30% are exploring technology to create new business opportunities and enhance customer experience. Digital capabilities are now a 'must-have' element for SMEs to remain competitive. In this context, digital transformation is identified as a strategic

imperative, and its influence on sustainable business growth for manufacturing SMEs is investigated in this study.

To promote the firm's reliable, long-lasting existence and continuous growth, it is important to identify the factors that hinder and stimulate sustainable growth. However, it requires more than just acknowledging the optimum combination of such elements; it should be able to formulate the accumulation, bundling and leveraging of those resources and capabilities to generate sustainable growth (Fraser et al., 2015). Having identified the four strategic imperatives where their relationships with sustainable business growth are investigated, it is crucial also to explore the effect of other factors that can influence the relationships. Consequently, this study also identifies and investigates entrepreneurial innovativeness for its mediating effects on the relationships between strategic imperatives and sustainable business growth. Although there is a large body of research dealing with leadership, entrepreneurship, and technical competence in SMEs, relatively little is known about the combined effects of the core competencies on SME performances in developing countries. More so, there is limited research linking the core competencies and business sustainability under the mediating effect of entrepreneurial innovativeness for owner-managed SMEs, with much of the evidence remaining anecdotal or speculative. Therefore, in addition to the strategic imperatives, entrepreneurial innovativeness is established as a potential mediator, and its influences on the relationships between each strategic imperative and sustainable business growth for manufacturing SMEs are investigated. In past studies, innovativeness has influenced numerous organisational factors that, in turn, affect firm performance (Byukusenge et al., 2021; Naheed et al., 2019; Zafar & Mehmood, 2019).