Determinants of Business Resilience Framework for Small Businesses: Moderating Effects of Financial Literacy

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Abstract: Covid-19 has significantly disrupted and devastated the world's economy. Data from Malaysia shows that more than 30,000 companies have closed their operations since the movement control order (MCO) implementation due to Covid-19 that began in March 2020. However, the effects on small businesses are especially severe, mainly due to the higher vulnerability levels and lower resilience related to their size. This study provides an empirical analysis of the key drivers leading to the business resilience of small businesses in Malaysia that have survived the Covid-19 pandemic. Data from 215 small businesses were collected physically and online across Malaysia from May 2021 to December 2021. Structural Equation Modeling (SEM) using Smart PLS 3.2.4 was used to analyse the data, whereby nine hypotheses were tested in the current study. The results showed that technology acceptance, government support, and financial literacy significantly influence business resilience among small businesses in Malaysia. The results also indicated that financial literacy moderates the relationship between compliance cost and government support with business resilience. Thus, the findings revealed three important determinants of small businesses' resilience framework, namely technology acceptance, government support, and financial literacy. The study recommends a dynamic, resilient framework to adopt in the "new normal" situation for the successful navigation of small businesses in the future. Moreover, the study provides insight into the key drivers for business resilience factors that small businesses must be concerned with, as the framework can be used to deal with not only the global pandemic but also uncertain conditions.

Keywords: Business resilience, financial literacy, government support, small businesses, Covid-19.

INTRODUCTION

Small and medium-sized companies play an important role in creating innovation, wealth, and employment, which further contributes to the country's economic development (Doern, 2009; Hamid, Kurniasari, Taib, Saheh, & Embong, 2018; Terziovski, 2010). Based on the experience of developed countries, SMEs in diverse and competitive sectors have huge potential to be the engine of progress in achieving sustainable economic growth (IMP3, 2006). Among several related issues on SMEs, their competitiveness and business strategies have become critical for their future development and sustainability. Therefore, the implementation of various policy measures and programmes is directed towards addressing a number of issues pertaining to the development of SMEs (IMP1, 1994). Unfortunately, the Covid-19 outbreak, which hit the world, has had a great impact on businesses, especially SME industries. Pandemic diseases are potentially unpredictable and pose severe threats to the continuity of an organization's operations and infrastructure. Besides, the Covid-19 pandemic negatively impacts all economic sectors in both developed and developing countries, including SMEs, and small businesses are the most vulnerable to these conditions (Aldianto, Anggadwita, Permatasari, Mirzanti, & Williamson, 2021). Although there is no generally accepted concept of small businesses, small businesses in Malaysia are classified as those having a range of 5 to 75 employees (SMECorp Malaysia). The adverse effects of Covid-19 on small businesses include interruptions of supply chains, cash flow problems, weaker demand for imported goods and services, inability to meet delivery dates, and increased risk aversion in financial markets (OECD, 2020). The Covid-19 outbreak is also likely to cause bankruptcy for many well-known brands in many industries as consumers stay at home and economies are being shut down (Tucker, 2020). SMEs, especially small businesses, suffer the most in times of crisis as they tend to be least prepared and may lack business continuity plans. Thus, having a strong business continuity plan

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may help minimise any negative impact on businesses during a pandemic (Turner & Akinremi, 2020).

The Covid-19 Pandemic has affected the global economy in two ways. First, the spread of the virus has encouraged social distancing, leading to the shutdown of financial markets, corporate offices, and businesses. Next, the rate at which the virus was spreading and the heightened uncertainty about how bad the situation could get have led to a flight to safety in consumption and investment among consumers and investors (Ozili & Arun, 2023). Besides, the travel restrictions imposed on people's movement in many countries have led to massive losses for businesses in the events industry, aviation industry entertainment industry, hospitality industry, and sports industry, among others. The combined loss globally was estimated to be over $4 trillion (Ozili, 2020). Some SMEs cannot survive beyond one month due to cashflow issues (Farrell & Wheat, 2016). Thus, SMEs are at a high risk of permanent closure after large-scale disasters, partially because they cannot pay for their expenses while being shut down (Schrank, Marshall, Hall-Phillips, Wiatt, & Jones, 2013). Similarly, the coronavirus (Covid-19) pandemic has created major disruptions in the economy and the lives of businesses worldwide, particularly in terms of whether they can continue their operations. These disruptions create a wide range of impacts on companies, and many of them are struggling financially (OECD, 2020). The overall direct initial hit to the GDP level typically ranges from 20%-50% in many major advanced economies (OECD, 2020). Many companies had to lay off their staff, while others had to reduce their working hours (Edgecliffe-Johnson, 2020). The pandemic has led to severe global socio-economic disruptions, including the postponement or cancellation of sporting, religious, political, and cultural events, and widespread shortages of supplies (Turner & Akinremi, 2020). In China, a fall in consumption combined with interruptions to production has disrupted global supply chains, affecting firms across the world (Fernandes, 2020). The Covid-19 pandemic outbreak has also resulted in a business shutdown, leading to a monumental disruption of trade and commerce in many industrial sectors. Retailers and brands face many short-term challenges relating to the workforce, health and safety, cash flow, supply chain, consumer demand, sales, and marketing. Many markets, especially in hospitality and tourism, are no longer existing, whereas online shopping, online communication, and online entertainment have witnessed unprecedented growth (Donthu & Gustafsson, 2020).

LITERATURE REVIEW

The term “resilience” is increasingly popular in many research disciplines such as health, medicine, business management, and economics. According to Ates and Bititci (2011); Bhamra, Dani, and Burnard (2011) and Kantur and Say (2015), resilience research is extremely desirable because it meets the urgent need to look at the vulnerable scenarios in which small and medium-sized firms (SMEs) respond. Generally, resilience can be defined as a set of personality traits and relates to a dynamic process of growth (Braes & Brooks, 2010). In this regard, resilience is important to small businesses due to the ability to maintain the functionality of a system when it is disrupted or the ability to retain the elements required to update or rearrange if an interruption changes the structure of a system's function.

Good entrepreneurs are constantly looking for methods to enhance their skills and abilities so that they are better equipped to anticipate dangers and overcome unforeseen obstacles. The organisation's leader, including its social capital, internal collaboration, organisational experience, and the support of its staff could all be the factors determining whether or not the organisation has high adaptive resilience (Purwanti & Hapsari, 2022). Organisational leaders who always have a vast experience in handling their businesses know how to enhance their performance in the critical condition such as Covid 19. Skills in technology tremendously assist them through thick and thin in business.

Most industries have seen an increase in regulatory requirements in recent years. While these new regulations are well-intended, they ultimately result in higher compliance costs for many businesses, especially SMEs. The term “compliance cost” describes all the costs incurred to follow and adhere to the relevant regulations. Costs associated with compliance include the salaries of those who work in compliance, time and money spent on reporting, new systems needed to meet retention requirements, and so on. In accordance with the OECD guidance, compliance costs can be broken down into three categories: administrative burdens, administration and enforcement costs, and substantive compliance costs. Implementation costs, direct labour costs (i.e. wages), equipment costs, material costs, and external services are some examples that fall under the category of substantive costs. This is because compliance costs can influence the long-term performance and survival of businesses, especially SMEs.

Research Framework and Hypothesis Development

Fig. (**1**) presents the research framework that attempts to explain the respective relationships involving the five (5) independent variables, namely compliance costs, financial resources, government support, technology acceptance, and financial literacy with business resilience.

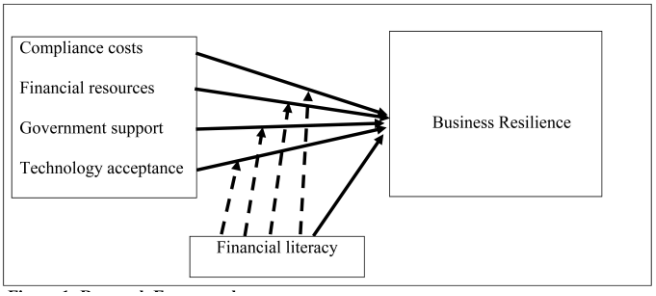

Fig. (1). Research Framework.

COMPLIANCE COSTS

Compliance costs increase as an industry's regulatory standards increase and a company expands (Hoche, 2021). In general, compliance costs are increasing for organisations as more regulations are being implemented to minimise or prevent fraud, loss of data privacy, pollution, or infringement. According to Ainapur (2020), compliance is becoming increasingly important for businesses worldwide; thus, having

sufficient local knowledge, along with being prepared and informed, is the key to success. Compliance costs are significant to SME businesses in ensuring their survival in the long run. According to a study conducted by Kyobe (2009), compliance costs serve as the most influential factor, yet both rural and urban SMEs have put forth little effort to develop policies and demonstrate compliance.

All expenses related to maintaining a company's compliance with applicable laws are included in compliance costs. Accordingly, businesses must have a thorough strategy with all the necessary policies and processes in place to adequately and promptly comply with compliance obligations. In addition, it is also vital to have a precise recordkeeping system to record such procedures. Hence, this leads to the following hypothesis:

H1: Compliance costs positively influence business resilience among small businesses in Malaysia.

FINANCIAL RESOURCES

Financial resources are one of the key drivers in the development of SMEs. SMEs require funding to remain in business and expand in the future because access to finance increases a firm's capacity to obtain financial resources (Adomako & Danso, 2014; Yanto et al., 2022; Owusu, Ismail, & Osman, 2019). Similarly, financial resources can contribute to the lifelong survival of SMEs in Malaysia. In order for SMEs to advance, expand, and innovate, they need financial resources (Moscalu, Girardone, & Calabrese, 2020). However, due to a lack of funding, SMEs struggle to operate well, expand, and bring new innovative goods and services to the market (Owusu et al., 2019). An increasing number of SMEs in both developed and developing nations often need to access a variety of sources of funding (Hussain, Millman, & Matlay, 2006). As such, many previous studies have claimed that SMEs have trouble getting financing (Bruns & Fletcher, 2008; Guijarro, Garcia, & Van Auken, 2009; Hughes, 2009; Mason & Harrison, 2004; Mason & Kwok, 2010; Attoukou & Nchare, 2022).

SMEs have generally developed as the backbone of many economies all over the world. Nonetheless, according to Klonowski (2012), SMEs tend to face difficulties in obtaining financing, despite its growing significance to the economy and individual business owners. Starting a business and growing it requires capital. Thus, one of the major ways for entrepreneurs to obtain revenue is through access to financing. Furthermore, internal and external financial resources are both available. Internal resources such as owner savings, family funds, and retained revenues can be used to produce internal funding sources.

In contrast, banks, private or public institutions, venture capitalists, and the government are the primary sources of external financing. However, a sizable amount of external finance for SMEs comes mostly from internal resources. This implies that for SMEs, especially those in less developed locations, obtaining external financing is the most difficult challenge (Harvie, Oum, & Narjoko, 2011). Accordingly, the following hypothesis was formed:

H2: Financial resources positively influence business resilience among small businesses in Malaysia.

TECHNOLOGY ACCEPTANCE

In general, any business that invests in technology will obtain benefits that make them productive and remain competitive in the current corporate world environment. Technology adoption may also be influenced by several other variables, including cost considerations, industry trends, and purchasing dynamics. In business, the CEO, the decision-making executive, or the owner typically takes on a crucial role in decisions regarding technology adoption and frequently makes the ultimate or sole choice about the purchase and adoption of technology. Several studies have already been conducted on the use and adoption of technology in various business types and scales and it has been shown that SMEs need the right approaches and solutions to embrace and incorporate technology into their business processes. According to Shanmugam (2021), technology adoption among Malaysian SMEs is a critical issue that requires ongoing scrutiny because SMEs contribute significantly to the country's Gross Domestic Product (GDP). This is because technology is a crucial instrument for creating high-quality goods and growing businesses in the global market. Technology is also one of the most important factors that are difficult to overlook in any organisation nowadays, given the present corporate environment (Shanmugam, 2021).

Roger (1983) described technology as a design for instrumental action that lowers the degree of uncertainty in the cause-effect relationships involved in reaching the intended result. Meanwhile, Ahmed et al. (2020) claimed that a person's attitude and perception of technology influence whether they would accept and use new technology. According to Mustafa and Yaakub (2018), for a business to succeed in something new or unique and develop company performance, the business should prioritise technology adoption. Thus, the adoption of new technologies creates opportunities for business and has many advantages. Businesses can use marketing intelligence to gather and disseminate information about customers, products, and rivals (Schmidt, 2017). Based on this discussion, the following hypothesis was developed:

H3: Technology acceptance positively influences business resilience among small businesses in Malaysia.

GOVERNMENT SUPPORT

Government support is important to assure the future viability and expansion of SMEs, particularly in the post-pandemic COVID-19 period. After Malaysia gained its independence in 1957, official measures for the growth of entrepreneurship were launched. These initiatives include the implementation of the New Economic Policy (NEP) (1957–1970), which was followed by the Fifth Malaysia Plan (1986–1990). Later, in 1991, the New Development Policy (NDP) (1991-2000) was launched. To date, the government has established many business support initiatives to safeguard the competitiveness of small businesses in light of the considerable contributions they make to Malaysia's economic growth. As such, both financial and non-financial supports are available for businesses. The programmes have also cost a significant sum of money and have been administered by numerous government entities over the past years. According to Zhou and Gumbo (2021), small businesses continue to be

the key drivers of any economy in the country. Therefore, all government levels must support the activities of small businesses (Ogujiuba, Olamide, Agholor, Boshoff, & Semosa, 2022).

Policymakers must improve the system for disseminating information and access to assistance programmes if they are to make government business support programmes that are relevant to the present business environment (Topimin & Hashim, 2021). Thus, the current study proposed the following hypothesis based on the foregoing discussion:

H4: Government support positively influences business resilience among small businesses in Malaysia.

FINANCIAL LITERACY

Literacy is vital for the survival and performance of entrepreneurs, especially among small businesses. The definition of literacy includes the skills of reading and writing as well as knowledge and expertise in a certain field (Atkinson, 2017). Financially literate business owners manage resources more effectively and make better use of financial data in the setting of small businesses, which increases the profitability of their enterprises (Treptow, 2014).

Over the past two decades, research has revealed that many developed and developing countries possess relatively low financial literacy levels, which is related to improved financial outcomes (Lusardi & Mitchell, 2014; Michaud, 2017; Munisamy et al., 2022). The idea of financial literacy implies a valuable life skill in the contemporary corporate environment where people are accountable for their short- and long-term financial decisions (Refera, Dhaliwal, & Kaur, 2016). Small businesses need financial literacy because Malaysia's economy may be seen as a backbone that is supported by the sector. According to Akhtar and Liu (2018), the financial literacy of business managers is necessary. Financial literacy can be defined as the capacity to successfully manage financial resources across the business life cycle and integrate it effectively with financial services and financial products (Akhtar & Liu, 2018). Remund (2010) defined financial literacy as the capacity and confidence to manage one's own finances in a way that is appropriate, leads to long-term benefits, and is based on an understanding of key financial concepts. Financial literacy is the set of skills and information that empowers business owners to develop efficient financial management plans for their businesses (Usama & Yusoff, 2019).

Financial literacy was described by the OECD as the awareness, knowledge, skills, attitude, and behaviour required to make sound financial decisions and, ultimately, achieve personal well-being (Erhomosele & Obi, 2022). Financial literacy is a fundamental idea for comprehending money and how to apply it in daily life (Kumari, 2020). Better financial literacy can directly contribute to the success of businesses in the future. A person's financial literacy can be measured by their ability to comprehend and make good use of a variety of financial abilities, such as managing one's own finances, creating a budget, and investing. The concept of financial literacy is the foundation upon which your relationship with money is built, and it is a learning process that continues throughout one's entire life. As supported by Njoroge (2013) and Muslichah and Sanusi (2019), entrepreneurs with a high level of financial literacy have a better probability of running profitable businesses than those with a low level of financial literacy. However, numerous earlier studies have also increasingly shown the importance of financial literacy in managing firm finances, including asset and liability management (Siekei, Wagoki, & Kalio, 2013). Additionally, Matewos and Navkiranjit (2016) emphasised that the importance of financial literacy goes beyond the interests of individuals and businesses, and it extends to the financial service industry as a whole as well as the stability of the financial system. Using a sample of 74 SMEs selected from Kinang, Matuga, and Msambweni, Chepkemoi (2017) investigated the effects of financial literacy training on business profitability by SMEs in the coastal region of Kwale County. The results showed that financial literacy improved business profitability and beneficially impacted SMEs' performance. Thus, in the current study, financial literacy was also tested as a moderator between the relationships of government support, technology acceptance, and financial resources with business resilience. The purpose of moderator is to modifies the form or strength of the relationship between an independent variable and dependent variable. Previous studies that had used financial literacy as moderating variables such as Mutlu and Özer (2021) and Owusu et al. (2019). From this discussion, the last hypotheses were derived as follows:

H5: Financial literacy positively influences business resilience among small businesses in Malaysia.

H6: Financial literacy positively moderates the relationship between compliance costs and business resilience among small businesses in Malaysia.

H7: Financial literacy positively moderates the relationship between government support and business resilience among small businesses in Malaysia.

H8: Financial literacy positively moderates the relationship between technology acceptance and business resilience among small businesses in Malaysia.

H9: Financial literacy positively moderates the relationship between financial resources and business resilience among small businesses in Malaysia.

RESEARCH METHODOLOGY

Sample Selection

The sample was chosen using a purposive sampling technique according to the predetermined standards for achieving the goals of this study. Purposive sampling is a nonprobability sampling strategy in which information is gathered from a specific group chosen on purpose Sekaran and Bougie (2016). For this reason, in the current study, the respondents (comprising small company owners) must be registered with the Companies Commission of Malaysia (CCM). According to records, Malaysia had roughly 900,000 small businesses in 2021. However, only a total of 384 small businesses are deemed essential to be tested as participants in this study (Krejcie & Morgan, 1970). Besides, based on other statistical views, the minimal sample size required for a 0.15 medium effect size is 117 (Green, 1991).

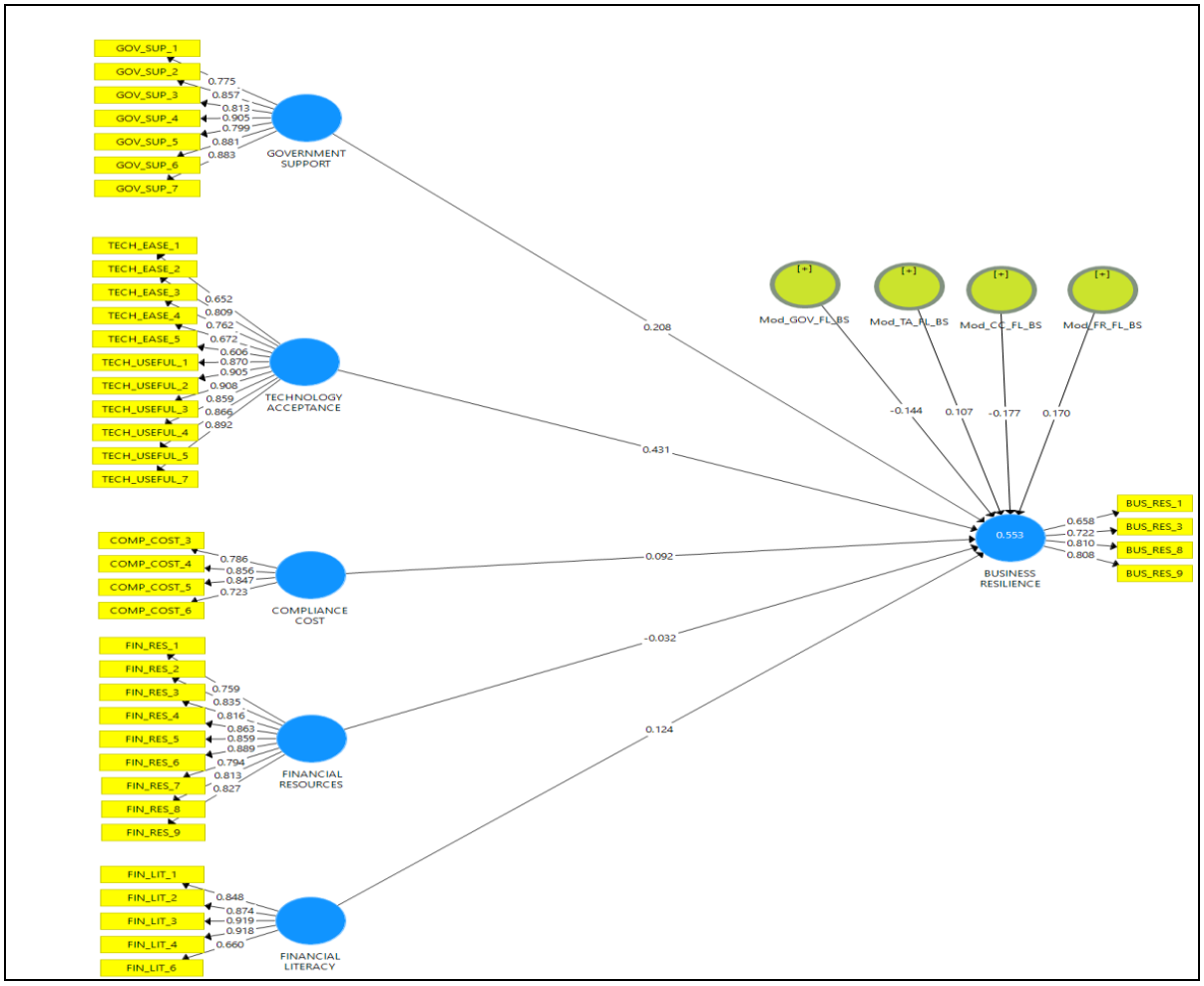

Fig. (1). Smart PLS framework for the study.

From May to November 2021, 640 respondents received a Google Form link via WhatsApp and other social media channels. Before the respondents could answer the questionnaires, necessary explanations were given at the outset to help them understand the purpose of the data collection. The survey received a total of 215 responses, which represents a 30% response rate.

Questionnaire Preparation

The data were collected using a structured questionnaire, which is divided into various sections. Section A captures individual demographic information, while Section B focuses on business demographic information such as the number of employees, type of business, and source of business funding. Next, Section C focuses on the measurement of business resilience factors, which are further divided into six subsections and consist of two parts. The first subsection consists of ten questions about business resilience, while the second subsection consists of eight questions about government support for entrepreneurial development. This is followed by the third subsection on technology acceptance, the fourth subsection on compliance costs, the fifth subsection on financial resources, and the final subsection on financial literacy. All subsections are classified using a seven-point Likert scale (ranging from 1-strongly disagree to 7-strongly agree), which indicates the level of respondents' agreement or disagreement with each item. The questionnaire was prepared based on the items provided in the articles by Hidayat, Latief, Nianti, Bahasoan, and Widiawati (2020) and Winarsih, Mutoharoh, Tahar, and Aziz (2020). An open-ended question is also included in this section, where respondents' opinions and recommendations are encouraged.

Two academicians looked over the questionnaire before it was finalised. The pre-test was performed to check the face validity of the items constructed (Sekaran & Bougie, 2016) and to see if potential respondents might have trouble understanding or identifying what a question means. Changes were subsequently made based on the academicians' feedback and suggestions. The process then went on with a small-scale pilot test with a few business owners; this pilot test was the first step in the research process as a whole. The goal of this pilot test is to make the questionnaire better, which will help identify if an approach that is meant to be used in a larger study is possible (Leon, Davis, & Kraemer, 2011). Besides, this was performed to see if the questions developed can be understood by potential respondents and to identify how long it would take for most people to fill out the questionnaire. Thirty (30) people were selected to take part in this pilot test, and the data were roughly examined. Some questionnaire items were changed based on the answers indicated by them. After the pre-test and pilot test phases, the fully finalised questionnaire was distributed to the respondents.

Data Analysis

Statistical Package for the Social Sciences (SPSS) version 22 was used for the descriptive analysis of the data. Additionally, inferential analysis was conducted using Smart PLS version 3. As suggested by Hair, Sarstedt, and Ringle (2019), all measurement analyses, including convergent validity of item factor loadings, average variance extracted (AVE), Cronbach's alpha (CA), and composite reliability (CR) with discriminant validity were examined independently prior to the development of the structural model. To determine the relationships among variables, researchers used bootstrap resampling with 5,000 iterations and a significance level of p = 0.05.

FINDINGS

Demographic Findings

The respondents' demographic information is reported in Table **1** below. 53% (113) of the respondents are females, while 47% (102) of them are males. Besides, 47% of the respondents are between the ages of 18 and 29, followed by 26% between 30 and 39 years old, 16% between 40 and 49 years old, and 11% who are at least 50 years old. The majority of the respondents (40%) possess a diploma as their highest academic qualification, followed by degrees (29%) and SPM/SPMV (15%). In addition, most of the respondents (54%) were married and had between zero and two dependents. In terms of business demographics, sole proprietorships (51%) and private limited (44%) were the business types managed by most of the respondents. Many of them also focused on food and beverages; due to the high awareness about saving for business, 71% of them also have savings for future survival. The table also indicates that the respondents depended on their capital as many respondents answered 'NO' to questions on borrowing from family members, friends, and loan institutions. However, 45% of them received financial support from government agencies. This implies that government agencies play a role in assisting small business activities, as discussed in the literature review.

Table 1. Demographic Statistics of Respondents.

Demographics	Descriptions	Frequency	Percentage (%)
Gender	Male	102	47
	Female	113	53
Age	18-29 years old	102	47
	30-39 years old	55	26
	40-49 years old	35	16
	50-59 years old	21	10
	60 years old and above	2	1
Marital Status	Single	93	43
	Married	116	54
	Divorced	6	3
Number of Dependents	Nil	83	39
	1-2 persons	63	29
	3-4 persons	36	17
	5-6 persons	25	12
	7-8 persons	5	2
	9 persons and above	3	1
Educational Level	UPSR	2	1
	PMR/SRP	3	1
	SPM/SPMV	33	15
	STPM/STAM	7	3
	Certificate/Diploma	87	40
	Bachelor's degree	63	29
	Master's degree	10	5
	Professional	10	5
Type of Business	Pvt Ltd	94	44
	Joint Venture	3	1
	Sole Proprietorship	109	51
	Partnership	9	4
Type of Industry	Engineering	10	5
	Food and beverages	99	46
	Retail sector	20	9
	Cloth and textile	10	5
	Services	33	15
	Healthcare	9	4
	Construction	9	4
	Education	11	5
	Others	14	7
Number of Workers	Nil	45	21
	1-2 persons	58	27
	3-4 persons	26	12
	5-6 persons	22	10
	7-8 persons	8	4

	9 persons and above	56	26
Own Savings	Yes	153	71
	No	62	29
Borrowing from Family	Yes	35	16
	No	180	84
Borrowing from Friends	Yes	5	2
	No	210	98
Loan Institution(s)	Yes	61	28
	No	154	72
Subsidiary from HQ/Parent Company	Yes	3	1
	No	212	99
Approximate Yearly Business Income	RM10,000 and below	58	27
	RM10,001-RM20,000	33	15
	RM20,001-RM50,000	26	12
	RM50,001-RM70,000	16	7
	RM70,001-RM100,000	24	11
	RM100,001 and above	58	27
Have you ever received any assistance from government agencies?	Yes	97	45
	No	118	55

Subsequently, the data were analysed individually in a two-step procedure, which includes the measurement model and the structural model, based on additional analysis using PLE-SEM (Hair et al., 2021). The analysis results are presented in the next section.

Assessment of Measurement Model (Outer Model)

Based on the initial assessment of the measurement model (outer model), the study found that the data fulfilled all the requirements for the acceptable assessment of the measurement model. Besides, in terms of Composite Reliability (CR), the value for each construct exceeded the minimum threshold value of 0.7. Comparatively, the values for Cronbach alpha were also satisfactory, as all the values were above the threshold of 0.6 for the model (Nunnally and Bernstein, 1994). Thus, all the constructs are deemed strongly reliable. Meanwhile, adequate convergent validity is achieved when the value of the Average Variance Extracted (AVE) of a construct is at least 0.5 (Hair et al., 2021), indicating that the construct is able to explain more than 50% of the variance among the scale indicators. Based on Table **2**, all the constructs show an AVE value of more than 0.5. Overall, it can be concluded that the data and constructs used in the study have fulfilled all the requirements for the evaluation of the measurement model based on reliability, internal consistency, and convergent validity indicators.

Table 2. Reliability Test of Variables - Convergent Validity.

Variable	No. of Items	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Business Resilience	4	0.745	0.838	0.565
Compliance Costs	4	0.818	0.880	0.648
Financial Resources	9	0.943	0.952	0.688
Government Support	7	0.933	0.946	0.716
Technology Acceptance	11	0.944	0.953	0.651
Financial Literacy	6	0.899	0.927	0.721

The heterotrait-monotrait (HTMT) ratio of correlation technique was used to test the discriminant validity (Henseler, Ringle, & Sarstedt, 2015). Table **3** shows that all values for the reflective constructs are above the HTMT threshold value. Therefore, the results showed that each construct could represent a unique phenomenon that was not represented by any other constructs in the model. In other words, the construct is not strongly linked to other tests that are meant to measure different theoretical constructs (Hair et al., 2021).

Table 3. Heterotrait-Monotrait Ratio (HTMT) – Matrix.

	1	2	3	4	5	6
1. Financial Resources						
2. Business Resilience	0.4307					
3. Compliance Costs	0.4031	0.6329				
4. Financial Literacy	0.3847	0.5149	0.6526			
5. Government Support	0.5977	0.5913	0.3165	0.3328		
6. Technology Acceptance	0.4053	0.7760	0.6285	0.5594	0.5873	

Redundancy analysis was used to determine the convergent validity of the reflective measures (Chin, 1988). Based on Table **4**, with the exception of compliance costs and financial

Table 4. Determination of co-efficient (R2), Effect size (f^2), and Predictive Relevance (Q^2).

Item	Path Coefficient	VIF	F Squared	R Squared	Q Squared
Business Resilience				0.553	0.453
Compliance Costs	0.092	2.067	0.009		
Financial Resources	-0.032	1.656	0.001		
Government Support	0.208	1.902	0.051		
Technology Acceptance	0.431	2.568	0.162		
Financial Literacy	0.124	1.793	0.019		

Table 5. Structural Model and Hypothesis Testing.

H	Variable	Beta Coefficient	Standard Error	t Value	p Value	Decision
H1	Compliance Costs -> Business Resilience	0.092	0.127	1.077	0.282	Not supported
H2	Financial Resources -> Business Resilience	-0.032	-0.012	0.415	0.678	Not supported
H3	Technology Acceptance -> Business Resilience	0.431	0.417	5.325	0.000	Supported
H4	Government Support -> Business Resilience	0.208	0.194	3.154	0.002	Supported
H5	Financial Literacy -> Business Resilience	0.124	0.094	1.776	0.076	Supported
H6	Mod_CC_FL_BS -> Business Resilience	-0.177	-0.133	1.793	0.074	Supported
H7	Mod_GOV_FL_BS -> Business Resilience	-0.144	-0.108	1.683	0.093	Supported
H8	Mod_TA_FL_BS -> Business Resilience	0.107	0.062	1.299	0.195	Not supported
H9	Mod_FR_FL_BS -> Business Resilience	0.170	0.098	1.390	0.165	Not supported

resources, all reflective measures with a path coefficient greater than 0.10 indicate that all the assessed constructs have adequate degrees of convergent validity (Sarstedt, Wilczynski, & Melewar, 2013). Concurrently, the value of the variance inflation factor (VIF) produced by every single construct was lower than three, demonstrating that multicollinearity is not an issue with this model. Table **4** also includes the R^2 value of 0.553. Evidently, 55.3% of the components that contribute to business resilience are the constructs explored in this study. Hair et al. (2021) indicated that the R^2 value of 0.50 for endogenous latent variables is defined as moderate. In addition, the most important F^2 number was scored by technology acceptance (0.162). This suggests that the effect size of the change in R^2 caused by the removal of an exogenous variable from the model is medium in magnitude. Nonetheless, the study found that the remaining variables did not significantly affect the results because the F^2 values are very low. As for Q^2, the value must be greater than 0 in order to determine whether a model has good predictive relevance. Therefore, with a Q^2 value of 0.453, it could be inferred that the values have been accurately rebuilt and that the model used in the study has predictive relevance.

Prior to analysing the structural model, the issue of collinearity was evaluated. In this model, the VIF values between 1.656 and 2.568, which are below the threshold value of 5 (Hair Jr, Sarstedt, Hopkins, & G. Kuppelwieser, 2014), did not reveal any lateral collinearity concerns. Using the bootstrap re-sampling technique, the path coefficient was computed to identify the significance of the hypotheses (5000 re-sample). Based on Table **5**, three of the five hypotheses for direct relationships were supported. Concurrently, technology acceptance (β =0.431, t=5.325, p>0.005), government support (=0.208, t=3.154, p>0.005), and financial literacy (β =0.124, t=1.776, p>0.005) were supported; hence, H3, H4, and H5 are significant. In contrast, only government support (H7) confirmed the hypothesis for financial literacy as a moderator (β =-.144, t=1.683, p>0.005).

DISCUSSION

The results of the study indicated that technology acceptance (H3) positively influences the business resilience of small businesses during Covid-19. This result is consistent with a study by Mustafa and Yaakub (2018), which stressed that businesses should prioritise technology adoption because it creates many advantages and opportunities to succeed in the future. Without technology, it is difficult for small businesses to expand beyond their small territories. Therefore, small businesses must have a good perception of technology and be technology savvy to sustain in the market (Ahmed et al., 2020). However, due to financial constraints and talent management, small businesses may face many challenges to adopt the new technology, which evolves rapidly nowadays. Hence, government support is also essential to assist them tremendously, especially in Malaysia, where many individu-

als are receiving help from the government such as subsidies and financial assistance to survive in the short and long run.

Therefore, the authors agree that government support (H4) ensures the business resilience of small businesses during the Covid 19 pandemic, thus supporting (Hidayat et al., 2020) study on business resilience among small and medium-sized enterprises during the Covid 19 outbreak in Indonesia. Support from the government in the forms of financial assistance, delays in loan repayment, debt rescheduling, and tax relief has helped many small businesses. At the same time, fewer orders are received from customers as economic activities slow down. As a result, small businesses are able to manage their cash flow and this allows them to re-arrange their business strategies in crisis management during critical periods. The result is also consistent with a study by Topimin and Hashim (2021), which requires the government to improve its system for small businesses to access assistance programmes to support them.

Nevertheless, small businesses still need financial literacy to improve their business conditions because it is also essential for them to understand the business cycle well. In fact, financial literacy is a valuable skill where small businesses are accountable for their short- and long-term financial decisions (Refera et al., 2016). Thus, a significant relationship between financial literacy and business resilience, as per H5, is expected and has been supported by many researchers including (Njoroge, 2013), who mentioned that entrepreneurs with a high level of financial literacy have a better probability of running profitable businesses and vice versa. Companies that can read the financials of their businesses may know how to plan their movements wisely, rather than simply using the money for personal or irrelevant investments.

Additionally, the results also indicated that financial literacy moderates the relationship between government support and business resilience among small businesses (H7). Hence, this proves that financial literacy plays a significant role in moderating the relationship between the variables. However, it did not show a significant relationship for other tested moderators.

CONCLUSION AND FUTURE RESEARCH DIRECTIONS

Covid-19 has challenged small businesses with many uncertainties that some even closed their businesses due to less resilience to such a situation in the business environment, and numerous challenges were faced by many of the small businesses to run their businesses daily. Although it has been acknowledged that financial resources, technology acceptance, and many other factors are vital in facing such difficulties in future circumstances, the current study suggests that small businesses' resilience is essential in handling unexpected natural disasters, economic depressions, and business transformation to foster sustainability (Sinniah et al., 2022). In other words, organisational resilience is the foundation of an organisation's long-term viability.

The current study aims to evaluate some factors related to business resilience and the moderating effect of financial literacy on the relationships of compliance costs, government support, technology acceptance, and financial resources with business resilience. The findings supported Topimin and Hashim (2021), who stated that government support is critical for small businesses to expand and sustain themselves in the long run, as well as Njoroge (2013) who mentioned that financial literacy would make small business values more economical, efficient, and effective. Moreover, technology acceptance also plays a key part in this study, as it is consistent with previous research by Mustafa and Yaakub (2018). People are moving to technology by insisting on the use of digital platforms due to Covid-19, which will be applied continuously. However, the role of financial literacy as a moderator for the other four factors is only significant to one relationship, which is between government support and business resilience, but no moderating effect was observed on other factors. Organisational resilience, on the other hand, requires significant planning and anticipation, which then leads to adaptation to uncertain circumstances. Therefore, appropriate government support, the latest technology for businesses, and financial literacy are all critical to business resilience. Some limitations of this study include the fact that the study focused only on small Malaysian companies. Thus, future research may add more value by investigating and comparing business resilience among post-pandemic small businesses or other organisations in other countries. Besides, future studies may also examine other factors related to business resilience among small businesses.

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