

# Preparedness Action of Small and Medium Enterprises (SMEs) in the Food Industry to Confront the COVID-19 Pandemic

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#### ABSTRACT

The COVID-19 pandemic is the greatest threat to global health. It has a farreaching socio-economic impact on nearly all countries globally. The first case was reported in Malaysia on 25 January 2020. The number of issues kept increasing until the government announced the Movement Control Order (MCO) on 18 March 2020. As a result, the closures have had a major impact on businesses, especially small and medium enterprises (SMEs). This COVID19 pandemic greatly impacted worldwide compared to the H1N1 pandemic outbreak in 2009. This study aimed to examine the concept of preparedness actions of SMEs in the food industry to confront the COVID-19 pandemic. The study adopts a qualitative method of collecting data through documentation and library research to achieve this objective. The data consists of primary and secondary data gathered from books, articles, journals, reports, newspapers, and online databases. The findings of this study indicated that preparedness actions could be divided into





survival and mitigation actions. Survival actions cover financial planning, business operations, and crisis preparation actions. Meanwhile, to mitigate the impact of COVID-19 on business, the preparedness actions needed are assessing the impact of the pandemic on the organizations from operational and financial perspectives, evaluating the supply chain, and identifying potential points of failure. The outcome of this study is significant in terms of enhancing the knowledge of preparedness of SMEs in confronting the COVID-19 pandemic outbreak.

**Keywords**: COVID-19, Food Industry, Preparedness, Small and Medium Enterprises

#### INTRODUCTION

The COVID-19 pandemic is a tragedy that occurred to billions worldwide. The epidemic has had a negative impact not only on the global economy but also on small and medium enterprises (SMEs). There is no denying that the COVID-19 pandemic that hit the world has affected many sectors. Economists have predicted that the momentum of economic activity from March 2020 onwards will be slowed down without knowing when it will end (Segal & Gerstel, 2020). Among the negative impacts of COVID-19 from an economic point of view are weak economic and financial results, reduced demand, supply chain disruptions and troubled sectors of employment, which have challenged most economies, including the Malaysian economy (Ernst & Young, 2020).

A total of 364,191,494 confirmed cases of COVID-19 were reported to the World Health Organisation, including 5,631,457 deaths (World Health Organisation, 2022). Following that, a government-ordered MCO was implemented throughout Malaysia, which affected and disrupted business activities in all sectors, including the survival of SMEs in the food industry. This can be seen when all food premises, such as factories, restaurants, and food stalls, were instructed to close their businesses to curb the spread of the COVID-19 pandemic. The MCO limits not only the movement of individuals but also the smooth running of industrial activities and operations as a source to the production of goods and services, which then leads to temporary or permanent retrenching of workers. The closure of businesses

has taken a toll on all levels of businesses. However, the impact was more severely observed on SMEs, which now need to be prepared to face another disaster if it happens again. Therefore, this study will study the preparedness of SMEs focusing on the food industry to confront the COVID-19 pandemic.

#### LITERATURE REVIEW

## The Coronavirus Disease (COVID-19)

The coronavirus (COVID-19) is an infectious disease caused by a newly discovered coronavirus (WHO, 2020). The COVID-19 disease declared a pandemic poses a serious threat to global health. The disease has a long incubation period and is highly infectious (Wang et al., 2020). According to Rampal and Liew (2020), the first four cases of COVID-19 were reported on 29 December 2019. On 25 February 2020, the Centre for Disease Control and Prevention (CDC), United States of America (USA), announced that they were preparing for a "potential pandemic" of the novel coronavirus. On 4 March 2020, the Health Minister of Germany said that the new coronavirus had become a "worldwide pandemic". The disease then spread to more than 114 countries before the WHO officially declared a pandemic on 11 March 2020. It has strained the health systems of many countries and economies worldwide. Most countries still grapple with the problem (Tantrakarnapa et al., 2021).

In Malaysia, 4,578,741 COVID-19 cases were reported to the Ministry of Health (MOH), with 35,787 deaths as of 5 July 2022 (Ministry of Health, 2022). The first case was reported on 25 January 2020 (Rampal & Liew, 2020; Berita Harian, 2020). The first death due to the infection was on 17 March 2020. There were already eight cases by the end of the week since the first reported COVID-19 case in Malaysia. The following week, on 8 February 2020, the number of cases doubled to 16 until 27 February 2020, which marked the beginning of the second wave of the COVID-19 infection (Rampal & Liew, 2020). One week later, there was an exponential growth of COVID-19 cases when 55 cases were reported in Malaysia. The same trend was observed the following week, with 158 cases on 12 March 2020 (Berita Harian, 2020). The number of cases doubled every three days until 18 March 2020, when 790 cases were reported. The MCO was enforced for the first time in Malaysia due to the pandemic.

The dire urgency in controlling the outbreak to prevent the collapse of the healthcare system forced the government to impose this more stringent action. The Malaysian Prime Minister announced a limited lockdown called the Movement Control Order (MCO) on 16 March 2020. The first MCO (MCO1) started on 18 March until 31 March 2020. It continued for another two weeks (MCO2) until 14 April 2020 (McKibbin & Fernando, 2020). All universities, schools, religious places, and nonessential sectors were closed during the MCO. Interstate travel was not allowed unless for valid reasons. Only the head of the family can buy groceries within a 10 km radius. The police and the army coordinated and monitored people's movements (Salim et al., 2020). COVID-19 started as a health crisis, which quickly evolved into a global economic crisis at a speed and magnitude we have not seen in our lifetime. The ripple effects are still unfolding on a global scale, and it is unlikely that the true impact of this pandemic can be measured until the situation stabilizes.

## **Small and Medium Enterprises (SMEs)**

A few levels of a corporation include multinational enterprises, SMEs, and micro-enterprises. The levels of a corporation are distinguished by either the sales turnover or the number of full-time employees. Many developments in the economy since 2005, such as price inflation, structural changes, and changes in business trends, have caused a review of the SME definition in 2013. The new SME definition was endorsed at the 14th NSDC Meeting in July 201, which covers all sectors, namely services, manufacturing, agriculture, construction, and mining and quarrying (SME Corp, 2020). The sales turnover and the number of fulltime employees are the two criteria used to determine the definition with the "or" basis as follows. For the manufacturing sector, SMEs are defined as firms with sales turnover not exceeding RM50 million or several fulltime employees not exceeding 200 people. Meanwhile, for the services and other sectors, SMEs are defined as firms with sales turnover not exceeding RM20 million or several full-time employees not exceeding 75 people (SME Corp, 2020).

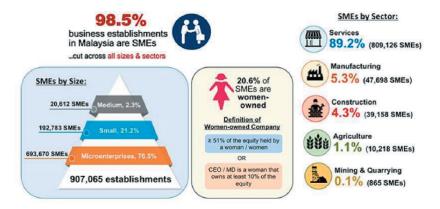


Figure 1: Overview of SMEs in Malaysia Source: SME Corp (2019)

According to Figure 1, there are 98.5% of SMEs in Malaysia. The services sector dominates the SME population at 89.2%, totalling 809,126 SMEs. The manufacturing sector is the second-highest population in Malaysia at 5.3%, with 47,698 registered SMEs with the SME Corporation. Looking at the numbers from the figure, the food industry is included in both services and manufacturing sectors, which shows the significance of the food industry through SMEs.

The food and beverage industry is unusual among the numerous industries affected by the pandemic because it provides for some of humanity's most fundamental necessities. This is one of the world's most rapidly rising industries. Agriculture and the industrial sectors responsible for producing food, drinks, and tobacco in the European Union (EU) account for 75% of bio-economy turnover and 80% of employment in the whole EU bio-economy (Chowdhury et al., 2020). With the significant number of SMEs in Malaysia, especially in the food and beverages sector, this research was conducted to explore how SMEs can survive the pandemic that is now declared endemic. This paper will help to give insights into the methods of preparedness SMEs can take to sustain themselves in the business world.

# Impacts of COVID-19 on SMEs

The COVID-19 pandemic has had several effects on the economy, particularly SMEs, on both the supply and demand sides (Pratama et al.,

2021). Companies incur a decrease in labour supply due to ill workers or who must care for their children while schools are closed, and people's freedom of movement is restricted. Since many enterprises were closed, there has been a reduction in overall supply. Lockdowns and quarantines used to contain the epidemic resulted in further and worsening decreases in capacity utilization (OECD, 2020). Other than experiencing labour shortages, SMEs also experienced logistical problems on the supply side due to transportation disruptions and human resources shortages. With halted production lines during the lockdowns, many firms suffered reduced demand or incapacity to produce their products (Juergensen, 2020).

Additionally, a demanding fall has occurred due to lower investment and utilization (Seetharaman, 2020). Purchases of nonessential products and services began to decline among consumers. Consumers began to be frugal and cautious in their purchases, fearing that their savings would run out due to unpredictable conditions throughout the pandemic. The resilience and adaptability of SMEs in coping with the expenses may be lower. Given their smaller size, low level of digitalization and challenges in accessing and integrating technologies, SMEs may incur significantly greater costs for prevention and requested changes in work processes, such as the move to teleworking (OECD, 2020).

According to Bank Negara Malaysia (BNM), SMEs' financial problems were apparent in the third and fourth quarters of 2019 since their average debt-to-equity ratio was 25% and their profit margin was only 5.7% (BNM, 2020). Therefore, it is impossible to prevent the effects of immediate shock scenarios on business stability. The pandemic has affected not only SMEs in Malaysia but also around the world. For example, 11% of SMEs suffered during the pandemic and forced isolation in Russia, which at first glance did not appear to be catastrophic (Razumovskaia, 2020). According to survey data from May 2020, 35% of SMEs in the United Kingdom believed they would not be able to reopen, and 41% had stopped operating. In Germany, one-third of SMEs anticipated a more than 10% drop due to the crisis (Juergensen, 2020). These all show that SMEs worldwide have experienced great losses and difficulties in sustaining their businesses during the pandemic. Therefore, SMEs need to be prepared for any uncertainties that might happen in the future. Hence, this research was conducted to highlight SMEs' survival and preparedness actions.

#### **METHODOLOGY**

This study aimed to examine the conceptual framework of preparedness actions that SMEs could implement in the food industry to reduce the risks and damage upon confronting the pandemic. This study adopts a qualitative method utilizing doctrinal research and library research to achieve the objective. The data was gathered from secondary data from books, journals, bulletins, newspapers, annual reports, records, online data-based, and others related to the research scope. The gathered data were analyzed using the document and content analysis approach.

## **Findings**

The COVID-19 pandemic was regarded as an international disaster that has affected all levels of business. Therefore, a systematic approach is needed to ensure smooth work in dealing with the disaster. Actions undertaken during the preparedness phase can reduce the immediate risk of damage and loss during a disaster event and lead to less reliance on emergency responses, which frees up resources for other tasks (Han & Joanne, 2012). Therefore, an organization's level of pre-disaster preparedness is recognized as one of the contributing factors to postdisaster response, recuperation, and continuity (Perry et al., 2001). In confronting the COVID-19 pandemic, SMEs need to be prepared so that the impacts will not be too great and affect the entire organization.

#### **Survival Actions**

# **Financial Planning**

Following COVID-19, all existing sectors, particularly the business and entrepreneurship sectors, have been forced to make changes and revamp action plans compatible with the current situation. According to Giones et al. (2020) and Duarte Alonso et al. (2020), the COVID-19 crisis has prompted business owners to consider financing options available in the future to offset business losses. Cazier et al. (2021) also stated that most entrepreneurs and businesses do not have enough savings during the COVID-19 period. Thus, one of the requirements that must be emphasized, particularly for small and medium-sized entrepreneurs, is the planning of business finances (Brown et al., 2018). Small and mediumsized businesses

require six months of preparation and financial planning (SME Corp, 2021). As a result, entrepreneurs must ensure that business savings are established ahead of the impending crisis.

Furthermore, austerity measures must be implemented to maintain resilience by re-evaluating the business's initial goals (Giones et al., 2020). Among the elements that need to be focused on when implementing austerity measures, according to Giones et al. (2020), are selling goods or services that do not contribute to profit streams, taking stock of goods or services that can contribute more to the revenue stream, reducing shortterm liability, and redesigning the business's finances. This is also supported by Pal et al. (2014) and Duerte Alonso et al. (2020), who emphasize the importance of entrepreneurs remaining resilient, particularly regarding resource and material determination.

## **Business Operations**

It is difficult enough to run a small business without having to reconstruct it after a natural disaster. Many businesses worldwide make the mistake of not adequately preparing for calamities and end up paying the price. According to the UN Office for Disaster Risk Reduction (2021), any affected business must inform their customers and clients to make them aware that the business is still open and will reopen when it is good. It is also essential for SMEs to keep their customers and clients informed if their business hours have changed. Other than that, the customers need to know what core services the SMEs still offer. This can be done through email, business websites, social media, or mail. If the customers do not hear anything from the businesses, they may assume the business is closed.

In addition, to ensure the continuity of a business, especially in the food industry, the business mode can be changed from physical to online mode. With today's logistics partners in the food industry, such as Food Panda and Grab Food, SMEs have choices to ensure their businesses can survive the pandemic. To prevent the spread of the virus, the government had to enforce social distancing and implement standard operating procedures when dining at a restaurant. Thus, some businesses choose to shift their mode of business online.

Many people feel that the COVID-19 pandemic has forced businesses across all industries to conduct a digital transformation that would have taken ten years otherwise. To react to the new social distancing measures, businesses were forced to establish new business models overnight. This situation provided corporations with an understanding of their current deficiencies and the gaps they would need to fill to adapt to their operations' future state (Kooli & Lock Son, 2021).

## **Crisis Preparation Action**

Crisis Preparation Action is essential for SMEs in the food industry to plan for the survival of their businesses to face the impacts of COVID-19. The COVID-19 crisis is uncertain and comes with difficult trade-offs, given the health, economic and social challenges it raises (OECD, 2020). In addition, COVID-19 impacts the whole food supply chain process from the field to the consumer, one of the economy's most important sectors. In light of recent challenges in the food supply chain, there is considerable concern about food production, processing, distribution, and demand. COVID-19 has resulted in movement restrictions for workers, changes in the demand of consumers, closure of food production facilities, restricted food trade policies, and financial pressures in the food supply chain (Aday & Aday, 2020).

During the current disease outbreak of COVID-19, small business owners must prepare for disruptions in their business and protect their employees' health and safety in the workplace. COVID-19 is fastspreading in nature when people are in close contact with one another, as they are infected through respiratory droplets produced when an infected person coughs or sneezes. Based on the recommendation made by the CDC (2020), the employer is recommended to prepare for business interruption and protect the employee through the following actions:

1. *Identify a workplace coordinator responsible for COVID-19 issues and their impact on the workplace.* 

The coordinator is responsible for mitigating risks to workers and other persons connected to the workplace that arise from exposure to COVID19. Among the tasks that need to be done by the coordinator is to closely monitor the official guidance and advice, particularly updates from the MOH and WHO.

### 2. Examine policies for leave, telework, and employee compensation.

Leave policies should be flexible and non-punitive and allow sick employees to stay at home and away from co-workers. Leave policies should also account for employees who must stay home with their children if there are a school or childcare closures or to care for sick family members. When possible, use flexible worksites (e.g. telework) and flexible work hours (e.g. staggered shifts) to help establish policies and practices for social distancing (maintaining a distance of approximately 6 feet or 2 meters) between employees and others, especially if state and local health authorities recommend social distancing.

#### 3. Review leave policies.

Companies should review their leave policies with all employees and provide information about available employee assistance services. Workers may use their sick leave if they are sick with the COVID-19 virus and must take time off work.

## 4. *Identify essential employees and business functions.*

Identify essential employees and business functions and other critical inputs such as raw materials, suppliers, subcontractor services/products, and logistics required to maintain business operations.

# 5. Develop a plan to ensure business sustainability.

Prepare business continuity plans for significant absenteeism, supply chain disruptions, or changes in a suitable way to conduct business.

# 6. Establish an emergency communications plan.

Identify key contacts, including suppliers and customers, for tracking and communicating about business and employee status.

7. Share the response plans with employees and communicate expectations.

Let employees know the plans and expectations if COVID-19 occurs in communities within a workplace.

On top of that, the employee also needs to protect workers from physiological risks. The risk can be minimized by assisting workers in managing emerging psychosocial risks or new work arrangements and promoting and maintaining healthy lifestyles, including diet, rest and sleep, exercise, and social contacts with friends and family (International Labour Organisation, 2020). These crisis preparedness actions could be useful for SMEs to be better prepared if the crisis is prolonged or other disastrous events affect the business.

# **Mitigating Actions**

The key to managing any crisis is preparation. One way of doing it is risk mitigation, a technique to prepare for and reduce the impact of hazards on a company (Lutkevich, 2021). It is a process of planning for disasters and lessening negative impacts. Although the objective of risk mitigation is to prepare a firm for all possible hazards, a good risk mitigation strategy will analyze the impact of each risk and prioritize planning around that impact. Mitigation, rather than preparing to avoid risk, is concerned with the aftermath of a disaster and the efforts that can be taken before the event to mitigate negative and potentially long-term consequences (Lutkevich, 2021). SMEs could adopt the following mitigation actions by Butler and Rivera (2020) to reduce the risk of managing their business during the pandemic.

1. Assess the impact of the pandemic on organizations from operational and financial perspectives.

SMEs should evaluate how the pandemic affects their business because it will influence whether there is a need to change policies, business hours and business acquisition.

## 2. Manage cash flow.

SMEs need to manage their cash flow because, during the MCO, they cannot run their business, thus affecting their business performance. In the meantime, they still need to pay the employee's salary and other monthly commitments to ensure the business stays relevant.

3. Address the impact of the pandemic on the obligation arising from contracts with a business partner.

Due to the MCO inflicted by the government, SMEs face difficulty surviving during hard times. Some business partners might want to withdraw from the business, so they must have a backup plan.

4. Address key risks and ensure business continuity.

The SMEs should revisit their crisis and continuity plans to ensure they are applicable, logical to implement, and effective.

5. Evaluate the supply chain.

A thorough understanding of the supply chain will aid in detecting any potential flaws. This involves starting with the most important items and searching beyond first- and second-tier suppliers, if possible, all the way down to raw materials. There should be a backup supply if the products contain a component from a country that becomes isolated or badly impacted by the pandemic.

6. *Identify potential points of failure.* 

The SMEs should identify the teams and individuals responsible for managing critical processes or services. There should be workers with the right skills who could step into critical roles if needed.

7. Communication on the pandemic's impact on workers.

Consistency and accuracy when delivering messages to workers are critical, as employees must know that their safety is a top priority.

### 8. Use scenario analysis.

The best way to use scenario analysis is by considering what the best- and worst-case scenarios are. The worst-case scenario that the SME could predict is by considering the long-term impact on working capital, bank covenants, or even rentals for stores and restaurants if public venues were to close.

SMEs can use the above steps to prepare for crises in the future. The experience of going through the COVID-19 pandemic should be taken as a lesson, and SMEs need to identify the risks from the disaster and do their best to reduce the risk to ensure the impact on their business is not too severe.

#### CONCLUSION

In conclusion, SMEs should address their preparedness actions, particularly in the food industry, to reduce the risk and impact that can further affect the closure of the business. The preparedness action consists of survival and mitigation actions. Survival actions cover financial planning, business operations, and crisis preparation actions. Meanwhile, to mitigate the impact of COVID-19 on business, among the preparedness actions needed are assessing the impact of the pandemic on the organizations from operational and financial perspectives, evaluating the supply chain, identifying potential points of failure, managing the cash flow, addressing the impact of the pandemic on the obligation arising from contracts with the business partner, addressing the risk and ensure business continuity, communicate on the pandemic's impact to workers, and using scenario analysis by considering the best- and worst-case scenarios. The outcome of this study is significant in terms of enhancing the knowledge of the preparedness of SMEs in confronting the COVID-19 pandemic outbreak.

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#### **CONFLICT OF INTERESTS**

The authors declare no competing interests, such as financial or personal relationships, concerning the writing of this article.

#### **AUTHORS' CONTRIBUTIONS**

Norazlina Mamat and Suliah Mohd Aris designed the study and gathered the literature on SMEs and the impact of Covid-19 on SMEs. Noorul Huda Sahari, Nur Hafizah Harun and Farhaneen Afzal Mazlan gathered the literature on crisis preparedness actions and mitigating actions.

#### REFERENCES

- Aday, S., & Aday, M. S. (2020). Impact of COVID-19 on the food supply chain. *Food Quality and Safety, 4* (4), 167-180.
- Berita Harian. (2020, July 15). Kronologi COVID-19 di Malaysia. https://www.bharian.com.my/berita/nasional/2020/03/666122/kronol ogi-COVID-19-dimalaysia.
- BNM. (2020, December 14). Financial stability review second half 2019. https://www.bnm.gov.my/ar2019/.
- Brown, N. A., Orchiston, C., Rovins, J. E., Feldmann-Jensen, S., & Johnston, D. (2018). An integrative framework for investigating disaster resilience within the hotel sector. *Journal of Hospitality and Tourism Management*, 36, 67-75.
- Butler, M. & Rivera, K. (2022, 23 January). Seven key actions businesses can take to mitigate the effects of COVID-19. https://www.strategy-business.com/blog/Seven-key-actionsbusiness-can-take-to-mitigate-the-effects-of-COVID-19
- Cazeri, G. T., Anholon, R., Rampasso, I. S., Quelhas, O. L., & Leal Filho, W. (2021). Preparing future entrepreneurs: reflections about the COVID-19

- impacts on the entrepreneurial potential of Brazilian students. *Journal of Work-Applied Management*, 13(2), 277-283.
- CDC. (2020, 4 April). Prepare your small business and employees for the effects of COVID-19. https://www.cdc.gov/coronavirus/2019ncov/community/guidance-small-business.html.
- Chowdhury, M. T., Sarkar, A., Paul, S. K., & Moktadir, M. A. (2020). A case study on strategies to deal with the impacts of the COVID-19 pandemic in the food and beverage industry. *Operations Management Research*, 1-13. https://doi.org/10.1007/s12063-02000166-9.
- Duarte Alonso, A., Kok, S. K., Bressan, A., O'Shea, M., Sakellarios, N., Koresis, A., Buitrago Solis, M. A., & Distriction, L. J. (2020). Covid-19, aftermath, impacts, and hospitality firms: An international perspective. *International Journal of Hospitality Management*, 91, 102654. https://doi.org/10.1016/j.ijhm.2020.102654
- Ernst & Young. (2020). COVID-19: Business impact survey. *Take 5 for business*, 8(7), 1–10.
- Giones, F., Brem, A., Pollack, J. M., Michaelis, T. L., Klyver, K., & Brinckmann, J. (2020). Revising entrepreneurial action in response to exogenous shocks: Considering the COVID-19 pandemic. *Journal of Business Venturing Insights*, 14, e00186.
- Han, Z., Nigg, J. (2011). "The influences of business and decision makers' characteristics on disaster preparedness—A study on the 1989 Loma Prieta earthquake". *International Journal of Disaster Risk Science*, 2 (4): 22–31.
- International Labour Organization, (2020, 15 July). Prevention and mitigation of COVID-19 at work for small and medium-sized enterprises, action checklist and follow-up. https://www.ilo.org/wcmsp5/groups/public/ed\_dialogue/lab\_admin/d ocuments/instructionalmaterial/wcms\_753619. pdf

- Juergensen, J., Guimón, J., & Narula, R. (2020). European SMEs amidst the COVID-19 crisis: assessing impact and policy responses. *Journal of Industrial and Business Economics*, 47(3), 499-510.
- Kooli, C., & Lock Son, M. (2021). Impact of COVID-19 on mergers, acquisitions & corporate restructurings. *Businesses*, *I*(2), 102–114.
- Lutkevich, B. (2022, 31 January). What is risk mitigation? https://searchdisasterrecovery.techtarget.com/definition/riskmitigation.
- McKibbin, W., & Fernando, R. (2021). The global macroeconomic impacts of COVID-19: Seven scenarios. *Asian Economic Papers*, 20(2), 1–30.
- Ministry of Health. (2022, 5 July). COVIDNOW in Malaysia. https://covidnow.moh.gov.my/.
- OECD. (2020, 15 July). Coronavirus (COVID-19): SME policy responses. https://www.oecd.org/coronavirus/policy-responses/coronavirus-covid-19-sme-policyresponses-04440101/
- Pal, R., Torstensson, H., & Mattila, H. (2014). Antecedents of organizational resilience in economic crises—an empirical study of Swedish textile and clothing SMEs. *International Journal of Production Economics*, 147, 410-428.
- Pratama, V., Santoso, I., & Mustaniroh, S. A. (2021). Development strategy of SMEs in the new normal era of coronavirus disease 2019 (COVID-19): A literature review. In IOP Conference Series: Earth and Environmental Science, 733, 012058. IOP Publishing. https://doi:10.1088/1755-1315/733/1/012058
- Rampal, L. & Liew, B. S. (2020). Coronavirus disease (COVID-19) pandemic. *Medical Journal of Malaysia*, 75(2), 95.
- Razumovskaia, E., Yuzvovich, L., Kniazeva, E., Klimenko, M., & Shelyakin, V. (2020). The effectiveness of Russian government policy to support SMEs in the COVID-19 pandemic. *Journal of Open Innovation: Technology, Market, and Complexity, 6*(4), 160.

- Salim, N., Chan, W. H., Mansor, S., Bazin, N. E. N., Amaran, S., Mohd Faudzi, A. A., Zainal, A. Huspi, S.H., Jiun Hooi, E.K. & Shithil, S. M. (2020). COVID-19 epidemic in Malaysia: Impact of lockdown on infection dynamics. https://doi.org/10.1101/2020.04.08.20057463.
- Seetharaman, P. (2020). Business models shifts: Impact of Covid-19. *International Journal of Information Management*, p. 54, 102173. https://doi.org/10.1016/j.ijinfomgt.2020.102173
- Segal, S., & Gerstel, D. (2020). The Global Economic Impacts of COVID-19, critical questions, centre for strategic and international studies (CSIS).
- SME Corp. Malaysia. (2020, 15 July). SME Definitions. https://www.smecorp.gov.my/index.php/en/policies/2020-02-11-0801-24/smedefinition
- Tantrakarnapa, K., Bhopdhornangkul, B., & Nakhaapakorn, K. (2020). Influencing factors of COVID-19 spreading: a case study of Thailand. *Journal of Public Health*, *30*, 621–627. https://doi.org/10.1007/s10389-020-01329-5/.
- Perry, R. W., Lindell, M. K., & Tierney, K. J. (Eds.). (2001). Facing the unexpected: Disaster preparedness and response in the United States. Joseph Henry Press.
- UN Office for Disaster Risk Reduction (2021, 4 April). Is Your Business Resilient to COVID-19 Planning Tool? https://www.undrr.org/.
- Wang, Q., Xie, S., Wang, Y., & Zeng, D. (2020). Survival-convolution models for predicting COVID-19 cases and assessing effects of mitigation strategies. *Frontiers in Public Health*, 8(325), 1-8. https://doi.org/10.3389/fpubh.2020.00325.
- World Health Organisation. (2022). WHO Coronavirus (COVID-19) Dashboard. https://covid19.who.int/.