STRATEGIES BY THE CONSTRUCTION COMPANIES IN MALAYSIA TO SURVIVE FROM THE IMPACTS OF THE COVID-19 PANDEMIC

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ABSTRACT

Many construction firms in Malaysia suffer a significant setback when the economy crashes due to the Covid-19 pandemic. Following the imposition of restricted movement orders in Malaysia, most construction projects in the country have been put on hold or delayed. This paper identifies the impacts of the Covid-19 pandemic on construction companies in Malaysia and the appropriate strategies to be adopted to survive the impacts of the Covid-19 pandemic. The primary data used in this paper were from literature reviews and questionnaire surveys. Statistical Package for Social Sciences (SPSS) software is used for data analysis to achieve the objectives of this study. The major findings indicate that the significant impacts of the Covid-19 pandemic are project delay, tight Covid-19 regulatory compliance, and enhancement of site safety due to Standard Operating Procedures (SOPs). The strategies adopted by construction companies, among others, are stricter site management to reduce material waste and more stringent financial management. This research is deemed appropriate to facilitate the construction companies in Malaysia with several strategies they can adopt to remain significant to the industry.

Keywords: Construction, Covid-19, Malaysia, Pandemic

1.0 INTRODUCTION

The Novel Coronavirus, which occurred for the first time in 2019, Covid-19, is a fatal viral illness caused by severe acute coronavirus syndrome 2 (SARS-CoV-2), which infects the breathing tract, with most patients suffering from minor infections (World Health Organization, 2019) as cited by Ain et al., (2020). This virus was first detected in Wuhan, in Hubei Province, China, in January 2020. Meanwhile, in Malaysia, Covid-19's early outbreak reported the first positive case on 25th January 2020, imported from China (Ain et al., 2020). The first positive COVID-19 case in Malaysia was announced on 3rd February 2020; this individual had a history of travelling to a neighbouring country for a business conference, which was joined by a Chinese group (Ahmad, 2020) as cited by Ain et al. (2020). Then, the situation worsened due to a religious reunion attended by more than 10.000 people from many regions conducted at Seri Petaling Mosque. As an early measure to curb the outbreak, the government has implemented a national lockdown at various stages with a specific standard operating system (SOP) beginning on 18th March 2020.

Before the outbreak of Covid-19, Malaysia's construction industry was one of the significant industries or sectors contributing to economic growth. The construction sector's productivity significantly impacts national economic growth (Chia et al., 2014). Additionally, Borneo Post Online (2012) reported that the construction sector attributed 5 percent to the nation's gross domestic product (GDP). Still, its total value of RM18.2 billion was very substantial because it assisted in creating significant economic linkages and had a compounding impact on other economic sectors, including financial, financial institutions, insurance, logistics, and manufacturing services during the year under consideration. Nevertheless, the Malaysian construction industry has experienced a decline during the crisis of the economy in the past. The covid-19 pandemic caused the economic crisis.

The covid-19 pandemic has affected the global economy since it has spread worldwide. This is because numerous countries have imposed a lockdown on control of the Covid-19's outbreak; thus, companies have not been permitted to operate. In Malaysia, the declaration of restricted movement orders or Movement Control Order (MCO) have resulted in many businesses from various sectors being shut down, including the construction sector. A total of 17,000 businesses are involved in the implementation of MCO in Malaysia, and they are the main drivers for the construction sector (Toh, 2020). On top of that, there are also issues regarding the workforce in the industry since the outbreak of the Covid-19 pandemic. During the Movement Control Order (MCO), the government made it mandatory for foreign workers in the construction industry to undergo Covid-19 screening. As a result, company owners had to pay Covid-19 screening costs for foreign employees not contributing to SOCSO, and the entire cost is projected at RM320 million, presuming that the average price for each test was RM400 (Param, 2020). The construction industry plays a vital role in the Malaysian economy, and there is a need for the parties, including the construction companies, to develop strategies to keep growing and remain significant during the economic downturn. However, empirical studies on the strategy for the construction companies in the country to survive during the Covid-19 pandemic are scarce as the outbreak of Covid-19 in Malaysia was around January 2020 and is considered an uncommon phenomenon. Hence, this paper aims to examine the appropriate strategies to be adopted by the construction companies in Malaysia to survive the impacts of the Covid-19 pandemic. This paper is divided into five (5) sections; Section 1 introduces the topic and the purpose of this study. Section 2 is on the literature review, followed by Section 3, which provides the methodology to conduct this study; Section 4 is on the data analysis and discussion of findings; and Section 5 is on the conclusion and recommendations for further research.

2.0 LITERATURE REVIEW

2.1 Covid-19 and Pandemic

The term pandemic comes from the Greek, in which pan means "all" and demos means "people" (Dumar, 2009). Various sources provide the definition of a pandemic. According to the World Health Organization (2010), the pandemic is "the worldwide spread of a new disease". An illness or condition must be infectious to be classified as a pandemic, not just because it is widespread or kills many people. For example, cancer kills many people but is not contagious or even infectious and therefore is not classified as a pandemic (Dumar, 2009). In early 2020, in other Asian nations, including South Korea and Iran, Covid-19 began to spread, with Italy being the first country in the Europe continent to be afflicted by the virus. This concerned multiple countries since the virus spread across the globe. Thus, on 11th March 2020, the World Health Organization had to proclaim Covid-19 as a pandemic. The pandemic has infected more than 700 million confirmed cases worldwide and has caused the death of more than 6 million people as of 29 May 2023 reported by the World Health Organization.

2.2 The Impacts of the Covid-19 Pandemic on Malaysian Construction Companies

Due to the introduction of the MCO, which seeks to limit the movement of individuals to disrupt Covid-19, many companies have had to shut down, and some others have lost their employment altogether. Most construction companies have stopped building operations in the building sector, and workers are urged to work from home (Farah, 2020). Farah (2020), identified several construction industry-related consequences of the Covid-19 pandemic and classified those consequences into positive and negative, as shown in Table 1.

Table 1 Impacts of the Covid-19 pandemic on Malaysian construction companies

Positive	Negative
Safety Prevention	Time
Regulatory Compliance	Human Resources
	Cost
	Resources Availability

As for the positive impacts, construction safety must be enforced thoroughly to prevent construction accidents and guarantee that the site is safe from dangers (Kanchana et al., 2015) as cited by Farah (2020). In the pandemic circumstances, parties are obligated to the Covid-19 SOPs in construction works where every employee, staff or anyone who visited the construction site must be thermally scanned (Farah, 2020), including basic SOPs such as using facial masks, keeping social distant and washing hands are required frequently. Additionally, regulatory compliance is vital to determine if the construction site can function since the authorities will randomly inspect the area. If the site does not correctly execute the SOP, the project will be warned or ordered to be closed.

Meanwhile, concerning the negative impacts, The MCO's enforcement, which began in March 2020, has affected the duration of construction projects involving several parties where several issues arose, such as delayed material supply owing to manufacturers ceasing operations. Next, specific numbers of employees and skilled employees are permitted to operate in the same place at one time. The social distance between construction workers is regulated, leading to decreased project productivity. Besides, the increase in costs incurred by the contractors during the pandemic was primarily due to the requirements to comply with the SOPs and the cost of conducting Covid-19 tests required by the government, especially for foreign labours (Farah, 2020). Lastly, the availability of resources in construction projects is also affected by the pandemic. Farah (2020), stated that it is also an issue during the MCO to have a limited supply of on-site and market resources, such as workers, materials, and equipment.

2.3 The Impacts of Past Recessions on Construction Companies

As for the profit made by the companies, in Malaysia, the significant increase in building material prices, instead of aggressive discounting to obtain contracts during low demand, was primarily responsible for decreased profits earned (Lai et al., 2014). As a result, regarding revenue, both land developers and Australian real estate investment trusts (A-REITs) saw significant sales reductions in 2008 and 2009, which persisted into 2010 in the event of land developers.

On top of that, because of the economic crisis in India, licenses are being issued more slowly, and there is a scarcity of financing alternatives for new projects, causing delays (Bhagatkar et al., 2015). Additionally, construction companies in European Union nations are facing financial difficulties and, in some instances, insolvency proceedings. Primarily comprised of small and medium-sized enterprises (SMEs), the sector heavily relies on bank loans, making it more susceptible to late payments from private and public clients (Nistorescu & Ploscaru, 2010).

Meanwhile, concerning the demand for development, in the context of civil engineering works in the European Union (EU) countries, Nistorescu and Ploscaru (2010), affirmed that the pace of growth has slowed compared to the previous year. Besides, it was in 1998 that the construction sector saw its first signs of collapse, with demand for new buildings falling by 35% from 1997

(Singapore Building Construction Authority, 2000) as cited by Goh (2005), in which the reason for the decline in construction demand in terms of the value of contracts granted was primarily due to the steep decline in the value of public sector contracts, which was cited as a contributing factor. The Great Recession affected the construction sector in the United Kingdom concerning the changes in procurement routes. Figure 1 shows the percentage of changes in each issue under the procurement route.

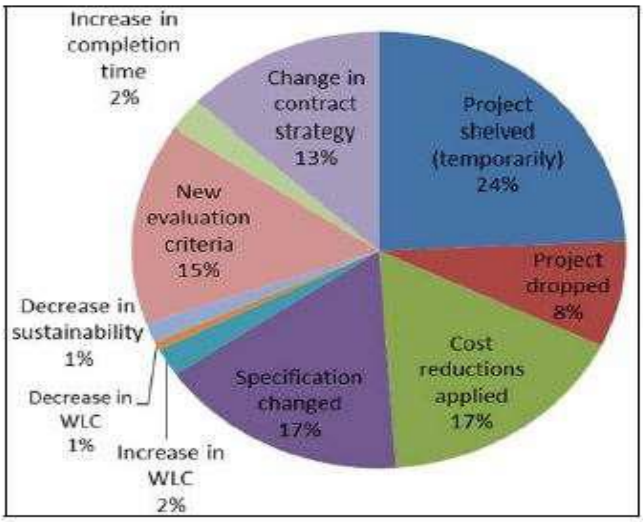

Fig. 1: Effects of The Great Recession on the UK Procurement Route
Source: Eadie et al. (2013)

The subsequent impact of the past recession is the increase in the unemployment rate. The construction sector in the United Kingdom was the worst affected by the recession, with young workers suffering far more misery (McQuaid et al., 2010), as cited by Eadie et al. (2013). Moreover, since the start of the financial crisis, the official unemployment rate in the United Kingdom has risen significantly, reaching an all-time high.

Lastly, following the beginning of the Asian crisis in Singapore, Goh (2005) stated that there had been a marked difference between the public and private sectors in terms of changes in the amount of demand for buildings. While evaluating the net effect, the public sector has a positive reaction (+677.86), whereas the private sector has a negative response (-1242.87). This indicates differences in demand for public and private buildings during the crisis. Furthermore, prices tend to decrease during periods of economic retrenchment as demand shrinks and competition rises.

2.4 The Implementation of Strategies by Construction Companies from Several Countries to Survive during Past Recessions

To stay afloat in a recession, construction contractors need to adopt various response strategies (Lim et al., 2010), as cited by Tansey et al. (2013) Firstly, it is a diversification strategy. In Singapore, 82% of respondents had diversified into other construction-related companies and services, including building development, maintenance of the property, mechanical and electrical work, construction of highways and infrastructure, the manufacture and supply of building materials (sand and aggregates), and pharmaceutical works (Lim et al., 2010).

Next is risk management which comprises acts or circumstances that the respondents regarded as posing a threat to the company's long-term viability and the steps taken to prevent or mitigate such

risks, according to the results (Danforth et al., 2017). Risk management methods for contractors that were most cited were using default insurance for subcontractors, raising bonding requirements for subcontractors, and implementing subcontractor performance contingencies.

The third strategy is cost control. For example, in response to the Asian financial crisis, construction companies in Singapore implemented a cost-control strategy, including (1) stricter site management to reduce material waste, (2) stricter financial management to keep the company's cash flow under control, and (3) stricter procurement processes to reduce material waste (Lim et al., 2010). Furthermore, Australian construction companies used several measures, such as maintaining a wage limit (freeze) rather than decreasing it and spending less on non-business expenditures (Zuo et al., 2015).

Regarding human resources, construction firms in the USA considered staffing control by downsizing human resources requirements in response to decreased workload during the recession, increasing employee morale and motivation and alleviating some employees' fears about job stability during the recession (Danforth et al., 2017). Besides, construction firms in the United Kingdom that pursued this approach during the 2008-2009 recession evaluated employee salaries and benefits to sustain and recruit the best employees, as well as the need for extra workers to handle anticipated heavy workloads (Ruddock et al., 2014).

Subsequently, financial management is also adopted by construction companies. Lim et al. (2010), found that most respondents had cast aside contingency funds from their company's savings for the long-term impact of the recession on business operations. Moreover, 68 percent of Singapore construction firms bought construction machineries and office equipment only in limited quantities, with the other types of machinery and office equipment being leased to cut costs.

Lastly, several companies utilised the approach of expanding their business models. For example, Australia's construction firms have decided to focus on their core businesses while diversifying and increasing the amount and kind of services they offer to their clients to guarantee flexibility and adaptability in the construction sector (Zuo et al., 2015). Additionally, a construction company in Malaysia (Hafizah et al., 2009) aimed to focus on delivering and obtaining new contracts in the local market, particularly in the infrastructure and housing construction sectors, amid the 1997 Asian financial crisis.

3.0 METHODOLOGY

This study aims to examine the appropriate strategies to be adopted by the construction companies in Malaysia to survive the impacts of the Covid-19 pandemic. In achieving the goal of this study, two objectives were composed. The objectives are 1) to explore the impacts of the Covid-19 pandemic on the construction companies in Malaysia and 2) to determine the strategies to be adopted by the construction companies in Malaysia to survive the impacts of the Covid-19 pandemic. The technique used to collect the primary data was through the questionnaire survey. This survey consists of three (3) sections: A, B, and C.

Section A comprises Part 1, which requires the respondent's background, and Part 2, which requires the background of the construction company. On the other hand, Section B incorporates questions concerning the impacts of Covid-19 on the construction companies; meanwhile, Section C is more subjected to the strategies adopted by the construction companies to survive the impact

of Covid-19. The selection of samples for the purpose of this study was obtained from the website of the Construction Industry Development Board (CIDB) with registration Grades 4, 5, 6, or 7. The location of contractors are from various states in Malaysia and are not restricted to certain areas to obtain more respondents. Then, the questionnaire was distributed through electronic mail only due to the restricted movement order implemented by the authority. Therefore, the researcher was not able to distribute the questionnaires physically. Instead, the researcher distributed the questionnaires to the construction companies by calling the selected companies to obtain their permission to send out the surveys before emailing them. Finally, Statistical Package for Social Sciences (SPSS) software was utilised to analyse the data.

4.0 RESULTS AND FINDINGS

This study focuses on the strategies adopted by construction companies to survive the impacts of the Covid-19 pandemic. Eighteen (18) samples from the questionnaire have been collected for these findings. Table 2 illustrates the summary of the respondent's background. Meanwhile, Table 3 demonstrates the background of the company.

Table 2 Respondents' background

Respondents' Background	Total Respondent	%
GENDER:		
Male	13	72.2
Female	5	27.8
AGE:		
20 – 29 Years	13	72.2
30 – 39 Years	5	27.8
YEARS OF EXPERIENCE IN THE INDUSTRY:		
0 – 5 Years	15	83.3
6 – 10 Years	3	16.7
POSITION:		
Managing Director	2	11.1
Project Manager	1	5.6
Contract Manager	4	22.2
Contract Executive	4	22.2
Others	7	38.9

Table 3 Company background

Company Background	Total Respondent	%
YEARS OF THE COMPANY'S ESTABLISHMENT:		
< 5 years	4	22.2
≥ 5 years	14	77.8
GRADE OF CIDB:		
G4	2	11.1
G5	1	5.6
G6	2	11.1
G7	13	72.2

TYPES OF PROJECTS MAINLY UNDERTAKEN:		
Building	14	77.8
Infrastructure	1	5.6
Civil Engineering	3	16.7
NUMBER OF EMPLOYEES:		
0 – 10 employees	7	38.9
11 – 20 employees	2	11.1
21 – 30 employees	3	16.7
More than 30 employees	6	33.3
VALUES OF CONTRACT UNDERTAKEN:		
Not more than RM 1, 000, 000	3	16.7
RM 1, 000, 001 – RM 3, 000, 000	4	22.2
RM 3, 000, 001 – RM 5, 000, 000	2	11.1
RM 5, 000, 001 – RM 7, 000, 000	3	16.7
RM 7, 000, 001 and above	6	33.3

4.1 Impacts of the Covid-19 Pandemic on Construction Companies in Malaysia

There are 12 questions in this section that focus on the impacts of the Covid-19 pandemic that construction companies face. Table 4 below illustrates the results of this question given by the respondents.

Table 4 Impacts of the Covid-19 pandemic on the company

No.	Impacts of Covid-19 Pandemic	YES		NO	
		QTY	%	QTY	%
1	Project delay	18	100.0	0	0
3	Tight Covid-19 regulatory compliance	18	100.0	0	0
4	Enhance site safety due to SOPs	18	100.0	0	0
5	Increase in cost to adhere to SOPs	18	100.0	0	0
6	Decrease in project productivity	18	100.0	0	0
9	Reduction in the number of construction projects undertaken	16	88.9	2	11.1
8	Financial constraints due to late payment by clients	15	83.3	3	16.7
2	Availability of resources becomes limited	14	77.8	4	22.2
7	Decline in revenue	13	72.2	5	27.8
10	Changes in the procurement system	10	55.6	8	44.4
11	Laying off workers	10	55.6	8	44.4
12	The lower contract price of projects awarded	9	50.0	9	50.0

Table 4 shows that most of the questions in this section have been agreed by all the respondents (100%; 18 respondents) that the Covid-19 pandemic impacted them. All the respondents affirmed that they experienced project delay, tight Covid-19 regulatory compliance that is supervised by the local authorities, enhancement of site safety due to SOPs to avoid Covid-19 outbreak among the site workers, and projects productivity have decreased because of the implementation of MCO. Next, the question with the second highest percentage (88.9%) that the sixteen (16) respondents agreed is the number of construction projects their companies undertook has decreased. The third highest percentage is 83.3%, whereby fifteen (15) respondents recognised their companies suffered financial constraints due to the late payment by their clients. Then, among all the respondents, fourteen (14) respondents answered 'Yes' with a percentage of 77.8% to the question of the

availability of resources becoming limited. Subsequently, thirteen (13) respondents encounter a decline in revenue; therefore, the percentage is 72.2%. Following that changes in the procurement system and laying off workers were confronted by ten (10) respondents with a percentage of 55.6%, respectively. Lastly, half of the respondents (9 respondents) admitted that their companies suffered lower contract prices for the projects they were awarded during this pandemic. Thus, the value of percentage represents the 50% of respondents. Other challenges that the respondents added in the open-ended question are as the following:

1. *Regarding internal issues in the company, workers cannot return to their places due to the pandemic. Thus, the company must provide incentives to those workers. The company also must pay for swab tests and quarantine costs.*
2. *Everything has slowed down, especially in the government sector that gives a slow response, late replies, unreachable by phone and etc.*

4.2 Strategies Adopted by Construction Companies in Malaysia to Survive the Impacts of the Covid-19 Pandemic

There are 16 close-ended questions that the respondents need to tick 'Yes' or 'No' to determine whether the respondents opt for the strategies to survive the impacts of the Covid-19 pandemic. The following Table 5 shows the results obtained from the respondents.

Table 5 Strategies adopted by the company to survive from impacts of the Covid-19 pandemic

No.	Impacts of Covid-19 Pandemic	YES		NO	
		QTY	%	QTY	%
7	Stricter site management to reduce material wastage	18	100.0	0	0
10	Stricter financial management	18	100.0	0	0
5	Mitigating risks in the construction process	17	94.4	1	5.6
8	Maintaining the existing level of workers' salary	16	88.9	2	11.1
9	Less money spent on non-business activities	16	88.9	2	11.1
4	Identifying risks in the design process	15	83.3	3	16.7
6	Prequalifying subcontractors	15	83.3	3	16.7
14	Concentrate on private projects	15	83.3	3	16.7
12	Set aside a contingency fund from the company's savings	12	66.7	6	35.3
13	Concentrate on public projects	10	55.6	8	44.4
11	Opt for alternative loan services	8	44.4	10	55.6
16	Company restructuring by acquisition approach	5	27.8	13	72.2
3	Joint venture with other construction companies	3	16.7	15	83.3
2	Venturing into other construction-related business	2	11.1	16	88.9
15	Company restructuring by a merger approach	2	11.1	16	88.9
1	Tender projects of foreign countries	0	0	18	100.0

Based on Table 5, two strategies managed to dominate the results with 100% (18 respondents) percentage value, respectively. The strategies are their companies carry out stricter site management to reduce material wastage, and stricter financial management. Secondly, with seventeen (17) respondents representing 94.4%, the approach of mitigating risks in the construction process was applied. Then, maintaining the existing level of the workers' salary and less money spent on non-business activities were adopted by sixteen (16) respondents, with a percentage of 88.9% for each of the strategies. Subsequently, there are three strategies executed by the same number of

respondents, which are fifteen (15), that resulted in a percentage of 83.3%, namely identifying risks in the design process, prequalifying subcontractors, and concentrating on private projects. Next, among all the respondents, twelve (12) of them, with a percentage of 66.7%, set aside contingency funds from the savings of their companies. The strategies of concentrating on public projects and company restructuring by acquisition approach were implemented by ten (10) respondents with a percentage of 55.6%, and five (5) respondents resulted in a percentage of 27.8%, respectively. On the other hand, three (3) respondents adopted a strategy to joint venture with other construction companies in Malaysia to survive during this pandemic, with a percentage of 16.7%. Two (2) of the strategies obtained by two (2) respondents are venturing into other construction-related businesses and company restructuring by the merger approach, whereby the percentage value for each strategy is 11.1%. Lastly, the study found that none of the respondents had applied the approach to foreign countries' tender projects to survive the impacts of Covid-19. One respondent gave another answer from the choices given, which is *Laying off irrelevant workers.*

5.0 DISCUSSION

5.1 Impacts of the Covid-19 Pandemic on Construction Companies in Malaysia

The discussion in this section emphasises the first objective, which is to explore the impacts of the Covid-19 pandemic on construction companies in Malaysia. In addition, the discussion for this objective focuses on the findings of those highly rated impacts from the perspective of all the respondents. Several effects were suffered by all the respondents (18 total respondents): project delay, tight Covid-19 regulatory compliance, enhancement of site safety due to SOPs, an increase in cost to adhere to SOPs, and project productivity has decreased. Therefore, it can be said that this analysis supported the affirmation made by Farah (2020), whereby a project's punctuality is directly linked to the flow of time. Examples include a delay in turning over the project due to a delay in material supply, a shift in work breakdown, and a restructuring of the project schedule due to time missed during the MCO phase. Next, as for the tight Covid-19 regulations, it is one of the essential elements that the contractors must execute to keep the project viable, and the authority has the power to approve or cancel the site if the SOP is not followed. Thirdly, Farah (2020) highlighted that safety measures had been implemented on-site, including compulsory daily temperature recording, the Covid-19 test for all immigrant workers, social distancing, worker management, cleanliness, contact tracing, break time management, worker residences management, and frequent pandemic awareness training sessions to prevent workers from becoming part of the pandemic cluster.

In addition, in terms of cost, the construction companies also need to consider the additional cost of Covid-19 tests, the designation of specific officers to monitor Covid-19 prevention on-site and transportation costs, which encourage social distancing among the employees and the expenses in supplying hygiene kits which includes facial mask, sanitiser, soap and more. Lastly, to cut project costs, workers were limited in number and working hours, as well as terminated. These approaches resulted in decreasing in project productivity. Subsequently, the second highest rated of all the impacts of the Covid-19 pandemic is a decrease in the number of projects undertaken, experienced by sixteen (16) respondents. The result is consistent with the findings of Nistorescu and Ploscaru (2010), who mentioned that during the global financial crisis of 2007, civil engineering work slowed down compared to the previous year. Furthermore, the house building sector, the new residential development, which was the backbone of construction activity until 2006, has steadily declined since 2007.

5.2 Strategies Adopted by Construction Companies in Malaysia to Survive the Impacts of the Covid-19 Pandemic

This section focuses on the strategies adopted by the construction companies in Malaysia to survive the impacts of the Covid-19 pandemic, which is the second objective of this research. The discussion for these objective priorities on the findings of those highly rated and the least rated strategies from the perspective of all the respondents. Two strategies were implemented by all eighteen (18) of the respondents with a percentage of 100%: stricter management on site to reduce material wastage, and more stringent financial management. These results are compatible with the research conducted by Lim et al. (2010), where they claimed that all the firms, they interviewed adopted those two strategies under the cost control measure. Furthermore, the respondents recognised that it was necessary to play a more active role in controlling its project sites, the cash flow, and the company's procurement procedures throughout the period of recession. On the contrary, the least rated strategy is tendering projects in foreign countries; none of the respondents adopted this strategy. Buys and Rooyen (2014) recommended this strategy under the measure of a diversification strategy to survive from recession. However, they also highlighted that from their survey, more than half of the respondents responded that they did not implement this strategy and opted for another strategy under diversification strategy, such as bidding on other types of work such as residential, commercial, or industrial projects including joint ventures with other construction firms. Hence, this result from Table 5 indicated that all the respondents do not participate in foreign projects as it is not relevant and suitable during the Covid-19 pandemic.

6.0 CONCLUSION

The Covid-19 pandemic has had severe impacts on the Malaysian economy, which includes the construction sector. This study aimed to explore the impacts of the Covid-19 pandemic on construction companies in Malaysia and the strategies adopted by the companies to survive those impacts. The significant impacts identified are project delay, tight Covid-19 regulatory compliance, enhanced site safety due to SOPs, increased cost to adhere to SOPs, and decreased project productivity. To survive the impacts of the pandemic, the contractors implemented appropriate strategies to keep growing and remain significant amid this challenging time. The contractors have reported several coping measures to manage the alarming impacts of the Covid-19 pandemic. The three (3) highest-rated strategies adopted by construction companies include stricter site management to reduce material wastage, more stringent financial management, and mitigating risks during the construction process. The researcher experienced several challenges throughout the entire research process that led to the limitation of the study. Firstly, the lack of time to complete the research is addressed. In addition, many construction firms work remotely; thus, it was quite challenging to reach them by telephone. Therefore, the number of samples is low. The number of respondents the researcher managed to obtain for the questionnaire survey is only eighteen (18). The results will be more reliable if a bigger sample size is acquired. This research only provides a limited understanding of the strategies adopted by construction companies in Malaysia to survive the impact of the Covid-19 pandemic due to the limitation of the research. Therefore, several areas are suggested for further studies, such as; 1) The strategies adopted by Quantity Surveying (QS) consultancy firms to survive the impact of the Covid-19 pandemic; 2) The effectiveness of the strategies adopted by contractors and QS consultancy firms to survive the impact of Covid-19 pandemic; and 3) The challenges faced by contractors and QS consultancy firms to adopt the strategies to survive from the impact of Covid-19 pandemic.

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