

Enhancing The Resilience of The Construction Industry's Performance in Malaysia: Pre and Post-Covid-19 Perspectives

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Abstract

During COVID-19 pandemic, construction industries faced a crucial financial crisis of rapid capital outflow slipping out of normal equilibrium including high liquidity and unstable exchange rates fluctuation. The disruption of financial distress of construction companies required the government to react aggressively to resurgent economic recovery for future growth through stabilizing the economy and monetary policies. Malaysia Economic Recovery Plan works as an essential driver to reshape the Government's versatility to overcome the effect of COVID-19 pandemic toward financial calamity and the global financial crisis. This study will identify the overall framework for sustaining the survivability of construction companies in Malaysia during COVID-19 pandemic by analyzing the strength and weaknesses of Malaysian construction companies. This study will provide strategic options that could apply to address the gaps through innovation management policies towards the Malaysian Economic Recovery Plan during pre and post COVID-19 in sustaining the survivability of construction industries' performance. This study will form a basis for designing future research to improve the Malaysian construction industry's sustainability.

Keywords: Construction, Performance, COVID 19, Malaysia, Resilience.

Introduction

The construction industry could be described as a substantial economic driver for Malaysia and the existence of the COVID-19 pandemic till now had a great effect on the construction industry including lives, businesses and world economic development as a whole. Esa et al (2020) claimed that COVID-19 had given lots of hindrances to the construction players such as the extension of time in delivering the project, the increased project costing and limited resources have hastened the project to achieve project success.

Recovering the economy after the COVID-19 pandemic required comprehensive economic transformation to counter the symptoms of the current economic crisis that we are facing

now. The overvalued exchange rates, credit crunch led to rising inflation rates, inflationary pressures, retrenchment and unemployment were the underlying problem caused by COVID-19 led to the economic recession, especially in the construction industry. The COVID-19 pandemic had impacted this industry in several ways like other industries, the number of construction jobs available reduced. These job losses are partly attributable to interruptions in work following work-related restrictions that were imposed to curb the virus spread, shortage in personal protective equipment (PPE) as it was prioritized for healthcare workers, and widespread market uncertainty. In addition, several construction projects were delayed and suspended (Alsharef et al., 2021).

Before the pandemic, the Malaysian Construction Industry was already fragmented with several issues such as having a high dependency on unskilled foreign labour, poor application of technology and problems with the implementation of policy (Baharum et al., 2012a). The Construction Industry Master Plan (CIMP) 2006-2015 was imposed by the Malaysian Construction Industry Development Board (CIDB) to overcome the problems faced by the contractors. It is a comprehensive plan to strategise the position and future direction of the Malaysian construction industry over 10 years. The overall underlying thrust of CIMP emphasizes four main aspects to improve the Malaysian construction industry involve: 1) The importance to upgrade skills and knowledge of the construction workforce; 2) Modernization of the industry; 3) Application of new technology; and 4) Continuous innovation in the industry. The CIMP however does not provide a clear insight of the problem faced by construction companies (Baharum et al., 2012b). There is a gap between what the policymakers espouse and the viability and practical realities of what is happening in the industry.

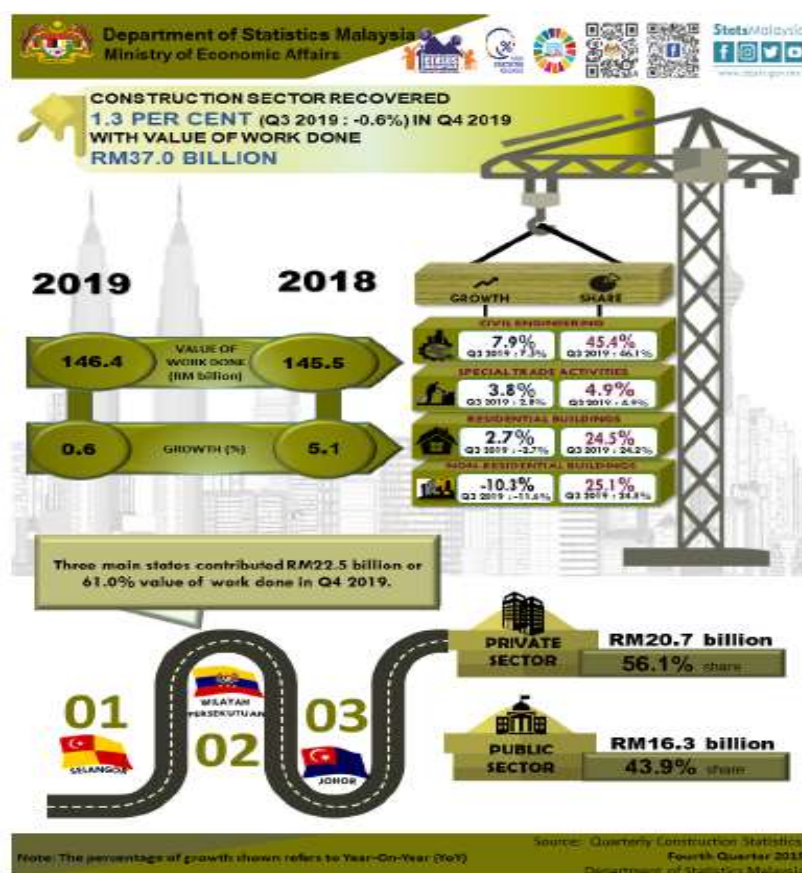


Figure 1: Construction Statistics 2019

Figure 1 clarified that the value of construction work done in the fourth quarter 2019 recovered by 1.3 per cent (Q3 2019: -0.6%) year-on-year basis, amounting to RM37.0 billion (Q3 2019: RM36.1 billion). The slow percentage of construction work affected by COVID-19 pandemic.

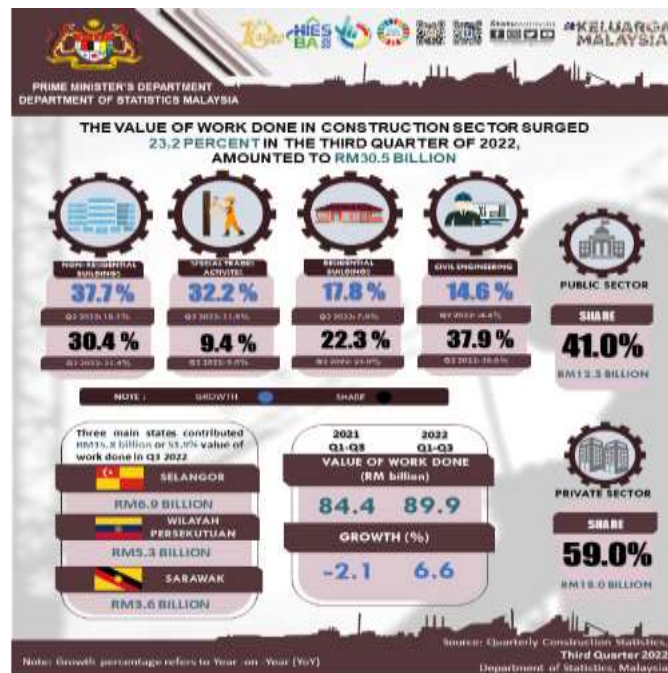


Figure 2: Construction Statistics 2022

However, Figure 2 shows that there has been some movement of construction work in Malaysia in 2022. The value of construction work done in the third quarter of 2022 surged 23.2 per cent (Q2 2022: 6.1%). The comparison between the pre and post COVID-19 on the percentage of construction work done increased in 2022 compared to 2019 but it still has less than 1-digit growth.

National Economic Recovery Plan (Nerp)

The National Economic Recovery Plan (NERP) was established in 1998 by National Economic Action Council (NEAC) to formulate a comprehensive framework of fiscal and monetary policies so that cost of capital can be reduced to revitalize the economic crisis during that time (Ariff and Abubakar, 1999). The NERP had consolidated the economic crisis which lead to the improvement of growth prospects for the Malaysian economy during 1998 such as embarking on expansionary fiscal policies, easing monetary policy, implementing capital controls, and fixing the exchange rate (Ariff and Abubakar, 1999). The NERP had reduced the economic crisis issues during that time and now the economic recession had struck again and the essential and productive sectors such as the construction sector were affected by the pandemic. Mukhtar et al. (2022) found that disruptions influenced by the COVID-19 crisis towards the construction industry, including labour, finance and economy, organization, material, equipment, supply chain, contract, time, technical, communication, and other industries.

The Construction Industry Master Plan was imposed by the Malaysian Construction Industry Development Board (CIDB).

The CIDB is responsible for making recommendations to the government on matters related to the construction industry and manages the important parts of the industry including

registration of contractors, helping advance the knowledge base of the industry, training, safety, and education. The government together with CIDB has put much effort to upgrade the level of knowledge and skills among the construction player. The Construction Industry Master Plan had underlying the main aspect to be followed by the construction leaders which involved the importance to upgrade skills and knowledge of the construction workforce, modernization of the industry, application of new technology and continuous innovation in the industry. These 4 guidelines required a long-term guided direction for Malaysian Construction companies to implement. Therefore, this study will dig into the issues and problems faced by the construction industry and develop the typology for the description and analysis of performance and management policy for construction industries.

The Malaysian construction industry can improve its performance and productivity where the construction companies need skills and capacities to decide on the best essential choices along with a high level of inspiration to guarantee the achievement of economic growth by adventure into the new technology available and implementing the policy set out by the government. Therefore, this study will discuss the issues and problems faced by the construction industry during pre and post-COVID-19 in sustaining the survivability of construction industries' performance. Description analysis of performance and management policy for construction industries also will be further investigated so that strategic options that the Malaysian government could apply to address gaps in research of performance and management policy for construction industries to achieve a better policy.

Literature Reviews

The COVID-19 lockdowns enforce regulation on all industries including construction, resulting in cancelled or delayed public projects (Ogunnusi, M., Omotayo, T., Hamma-Adama, M., Awuzie, B.O. And Egbelakin, 2022). Previous studies had identifies several issues that influence the sustaining the survivability of construction industries' performance in Malaysia.

Construction Performance

Ogunnusi, M., Omotayo, T., Hamma-Adama, M., Awuzie, B.O. And Egbelakin (2022) studied found construction company overhead cost increases such as overhead costs may result from the cost of insurance, administrative charges related is major highlights of the negative impacts of the COVID-19 pandemic on construction businesses. The higher overhead cost will reduce the performance caused by low-income generation from lower construction outputs; revenue loss; increased cost of construction resulting from delays; financial impacts on construction businesses resulting from disruption and delay of delayed financial commitments from clients. All the factors mentioned above need to be overcome with full responsibilities by the construction companies and the government's serious involvement to ensure the survivability of these industries remains stable in the future.

Material & Equipment and Supply Chain

In Construction Industry Material, equipment and supply chain are the important elements that need to be equipped at all the time. Jagun et al (2022) suggest that standard construction contract forms required when there was a disruption of workflow and supply chain. Mukhtar et al (2022) claimed that during the COVID-19 pandemic the construction materials declined by 42% worth RM4.6 billion due to preventive regulations, and the chain of supplies for building materials, equipment and plants was disrupted, this is due closure

of the country borders and the of traditional transit and traffic routes (Kingsley Ifeanyi Nweke and Nouban 2022). The lack of material, equipment and supply chain were significant issues that need to be taken seriously. Although the COVID-19 spread quickly, the government also need to take quick actions to safeguard against the viral infection but also to protect the whole nation smartly and strategically when the nation is in a state of emergency.

Contract & Time

During COVID-19, the construction work were suspended and held back. The problematic supply chain had resulted in project postponed and failed (Mukhtar et al., 2022). Based on the study done by Khalafallah et al (2022) COVID-19 impact on the extension of contract time and an adjustment of the contract price because of contractors' lack of experience in contractual issues when projects were postponed or delayed. They also claimed that construction project management are not documented and not well understood, which leaves project stakeholders with no guiding information to respond to such threats and no lessons learned to speed up the recovery of the industry in the wake of the pandemic. This is where the role had to be played by the Malaysian Construction Industry Development Board (CIDB) to help advance the knowledge of the contractors' base that currently issues. Creating well-developed training for all the registered contractors will help to reduce the above issues.

Labour Segmentation

Architectural Consultancy Practice (ACP) reported that 90% of contractor fail to pay their employee which worth of RM3.3 million (Mukhtar et al. 2022). Malaysian Construction Industry Development Board (CIDB) records show that most of the foreign labourers in the industry are general workers and unskilled labour who are willing to work extra hour, obedient and willing to accept a low salary (Baharum et al., 2012a). COVID-19 had caused this the foreign labourers to be send home immediately to their home country to avoid the spread of COVID-19 virus. The reduction of labour segmentation effect the productivity of the construction industry. Baharum et al (2012b) provide a several suggestion that can help to improve the current issues. They suggest the government in reducing reliance on labour to improve the contractors' performance and productivity and limit the inflow of foreign labour, the government has tightened the requirements for work permits and increased the levy on foreign workers according to their job sector. The CIDB has adopted two main approaches: (1) to train the existing foreign unskilled labour force; (2) to improve the industry's image and create an awareness among local workforce of the benefits of joining the industry. However, the changes imposed by the government and the CIDB are very slow to take effect.

The new policy development was crucial and the need for a distinctive design of modern procurement planning to address existing problems was crucial in creating strategic economic planning as well as living standard improvements the social networking, and operational processes to provide a continuous review of our national agendas and economic strategy and programmes in the future.

Methodology

This study uses a quatitative and qualitative method which aims to deeply understand the issues and problems faced by the construction industry during pre and post-COVID-19 in

sustaining the survivability of construction industries' performance. Description analysis of performance and management policy for construction industries also will be further investigated so that strategic options that the Malaysian government could apply to address gaps in research of performance and management policy for construction industries to achieve a better policy.

For quantitative method a checklist will be transferred to Google form and will be distributed to 300 respondents/constructors. The Checklist is focused on the question adopted with some modification from the study done by Muhamat et al (2019); Hassan et al (2018) to suit objectives of this study.

There were 4 matters discussed in the checklist : Performance, Governance, Operation, and Human Capital. The method used to score, was based on an unweighted index or dichotomous scores. All information was equally valued using the content analysis method and relevance to the items in each matter, which was given the score of “2” if the items available/implemented by the company, the score “1” given if the item partially available/implemented by the company, and “0” if it was not available/implemented by the company. The unweighted method scores adopted with modification from by the studies of Noor et al (2012); Arsad et al (2018) were as follows

$$CSVI = \frac{nj \sum_{t=1} Mij}{Nj * 2}$$

*CSVI=Construction Survivability Index

*Nj= Number of items expected for the company $n_j \geq$ items of each matters

*Mij=“2” if the items available/implemented by the company, the score “1” given if the item partially available/implemented by the company, and “0” if it was not available/implemented by the company

The qualitative approach is to explore professional opinion and focus group discussion by interviewing 30 respondents including 10 industries player, 10 educators, and 10 governments personels whose expert and very well verses with the stuations of construction industries in Malaysia especially pre and post COVID-19. The qualitative study in this research involved an interview to obtain additional information as well as further information. An interview protocol has been developed to facilitate the interview technique to be carried out. Interviews will be held in the form of recordings. Each recording will be transcribed using the NVivo software. The questions were adopted and adapted from the study done by (Naim et al., 2018).

Table 1

Questionnaires For Focus Group Discussion

	Objectives	Question For The Focus Group Discussion
1.	Identify the issues and problems faced by the construction industry during pre and post COVID-19 in sustaining the survivability of construction industries' performance	1. What are the key challenges faced by the construction industry during the pre-COVID-19 period in terms of sustaining their performance and survivability? 2. How did the COVID-19 pandemic impact the construction industry's ability to maintain its performance and survival? 3. What specific issues did the construction industry face during the post-COVID-19 period that affected its performance and ability to sustain survivability?

		<ol style="list-style-type: none"> 4. Did the construction industry experience any supply chain disruptions during the pre and post-COVID-19 periods? If so, how did these disruptions impact the industry's performance and survival? 5. How did the changing economic conditions, both pre and post-COVID-19, affect the construction industry's ability to sustain its performance and survivability? 6. What measures or strategies did construction companies adopt to address the challenges faced during the pre and post-COVID-19 periods in order to sustain their performance and survival? 7. Were there any regulatory or policy changes that influenced the construction industry's ability to sustain performance and survivability during the pre and post-COVID-19 periods? If so, how did these changes impact the industry? 8. How did the availability and access to skilled labour and workforce, both pre and post-COVID-19, affect the construction industry's performance and ability to sustain its survivability?
<p>2.</p>	<p>Presents a typology for description and analysis of performance and management policy for construction industries.</p>	<ol style="list-style-type: none"> 1. What are the key components or factors included in the typology for describing and analyzing the performance of construction industries? 2. How does the typology assist in categorizing different types of management policies implemented in the construction industry? 3. Can you provide examples of performance indicators or metrics used in the typology to assess the performance of construction industries? 4. How does the typology help in identifying strengths and weaknesses in the management policies of construction industries? 5. What are the benefits of using the typology for analyzing the performance and management policies in the construction sector? 6. Are there any specific challenges or limitations associated with applying the typology in the context of construction industries? 7. How can the typology contribute to improving the overall performance and effectiveness of management policies in the construction sector? 8. Has the typology been widely adopted in the construction industry, and if so, what impact has it had on improving performance and management practices?
<p>3.</p>	<p>Presents strategic options that the Malaysian government</p>	<ol style="list-style-type: none"> 1. What are the importance of research on performance and management policy in the construction industry for the Malaysian government?

could apply to address gaps in research of performance and management policy for construction industries to achieve a better policy

2. What are the key factors contributing to the gaps in research on performance and management policy in the construction industry in Malaysia?
3. How can the presented strategic options help address the gaps in this research?
4. Is international collaboration suggested as one of the strategies to overcome the gaps in research on performance and management policy in the construction industry in Malaysia? Why?
5. How can technology acquisition and innovation contribute to enhancing research on performance and management policy in the construction industry in Malaysia?
6. Is industry engagement in such research an important strategy recommended? Why?
7. What is the role of academic institutions in filling the gaps in research on performance and management policy in the construction industry in Malaysia?
8. How can the findings of research on performance and management policy in the construction industry be utilized by the Malaysian government to shape better policies?

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Conclusion

The Malaysia Economic Recovery Plan plays a crucial role in reshaping the government's adaptability to tackle the economic repercussions caused by the COVID-19 pandemic and the global financial crisis. This study aims to establish a comprehensive framework for ensuring the survival and resilience of construction companies in Malaysia amidst the COVID-19 pandemic. It involves a thorough analysis of the strengths and weaknesses of Malaysian construction companies while suggesting several strategic options and innovative management policies to effectively address the identified gaps. These measures will contribute to the successful implementation of the Malaysian Economic Recovery Plan, both prior to and following the COVID-19 crisis, ultimately bolstering the performance and sustainability of the construction industry. The findings are expected to provide a new benchmark as a new source, reference and mechanism to understand the capability of construction industries during pre and post COVID-19, which inline with the SDG 8: Decent works and Economic Growth and SDG 9: Industry Innovation and Infrastructure. At the end, this project also support the SDG 11: Sustainable Cities and Communities when this construction industry regained back their momentum to growth and provide benefit to our nation.

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