

The Impact of Covid-19 and Construction Business Survival Strategies: A Review

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Abstract

The outbreak of Covid-19 in late 2019 had a significant impact on all industries worldwide, including the construction business. This review paper aims to explore the impacts of Covid-19 on the construction business and to identify survival strategies for construction businesses during this pandemic. The study is based on selected articles to achieve its objectives. The review reveals several impacts of Covid-19 on the construction business survival, including financial difficulties, project delays, problems with material resources, and increased construction costs. To mitigate these impacts, several strategies have been identified that construction companies can adopt. These include adhering to guidelines from government authorities and the WHO, effective communication with customers, flexible human resource management, prioritizing technology, emphasizing health and safety aspects, being knowledgeable and prepared for the pandemic's impact, exploring new markets, and taking advantage of financial assistance provided by the government and banks. Ultimately, this study aims to provide beneficial insights to society, particularly for construction companies and researchers.

Keywords: *Construction, business survival, strategies, Covid-19, review*

1. Introduction

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the viral disease that causes coronavirus disease (Covid-19), which was initially discovered in Wuhan, China on December 31, 2019 (World Health Organization, 2020). In China, the virus quickly proliferated before going global and causing an epidemic. Everyone's attention was drawn by the report of the first few hundred instances of Covid-19 in early 2020. Many countries, including Malaysia, have experienced an increase in viral infections because of this outbreak, forcing statewide lockdowns and other restrictions on movement. Under the Prevention and Control of Infectious Diseases Act, 1988, and the Police Act 1967, Malaysia's government has decided to impose a stringent lockdown known as the Movement Control Order (MCO) since March 2020 to protect the safety of all Malaysians (Liew, 2021).

On the other hand, MCO halts export operations and suspends most commercial activity that affects small-to-medium-sized firms (SMEs). Briefly, the first MCO's implementation caused the biggest economic harm to Malaysia (Arfa, 2021). The effects of this crisis are being felt by several businesses, including engineering and construction. Due to the need for on-site physical activity, working from home may not be possible (Zamani et al., 2021). As a result, all construction-related operations have been put on hold while also considering the workforce's worries to stop the virus from spreading. Projects should ideally be carried out persistently and without delays. However, project delays are one of the biggest issues the global construction industry faces,

particularly considering the Covid-19 outbreak. All parties involved in a construction project, including clients, consultants, and contractors, may be quite concerned about delays (Fashina et al., 2021, Hamidah et al., 2022; Mohamad Shahril & Kamaruding, 2022). This is because the Covid-19-caused delay in building activity appears to have several detrimental effects on ongoing and upcoming projects that were canceled during the MCO period (Syed Zakaria & Singh, 2021).

Besides, the Malaysian government's MCO had caused most of the construction industry to incur losses which had influenced the global economy. Since construction companies are experiencing financial difficulties, many of their employees are being laid off which causes the construction business has taken a terrible turn (Biswas et al., 2021). It has also impacted the transportation system owing to transportation prohibitions and the post-travel quarantines which caused the supply of construction materials to be interrupted. Other than that, manpower is also a serious issue since many foreign workers were unable to visit Malaysia or leave their countries due to travel restrictions. Therefore, many construction businesses and contractors had to cope with the labor shortage because of limitations on the admittance of foreign workers (Syed Zakaria & Singh, 2021, Mohamad Shahril & Kamaruding, 2022). In addition, construction is a challenging sector where only the tough can survive (Construction Industry Development Board Height, 2020).

Although the MCO was lifted, the contractors still must face challenges such as having to implement strict standard operating procedures (SOP) on health and safety measures at building sites. As a result of the interruption, they have been unable to complete their task as initially and routinely planned. Moreover, construction projects and development are predicted to be slow-paced since construction activities typically take a long time to complete because of their nature and complications (Syed Zakaria & Singh, 2021). For the business to run its operations in the long term and avoid being affected by problematic circumstances such as pandemics Covid-19, survival strategies should be properly managed by the construction companies. In that regard, the objective of this study is to review the impact and survival strategies among construction companies during Covid-19. The review is based on the discussion by previous scholars.

2. Business Survival and Covid-19 Overview

Business survival is the state in which a company can meet its goals, boost its return on investment (ROI), and carry on with operations in the market (Owens & Legere, 2015; Kopnina, 2017). It also refers to the actions required to keep the organization operating during or after a crisis (Vyshnavi, 2017). Any sort of business needs it because today's businesses are more likely to face unforeseen business hazards. Additionally, survival tactics in a deteriorating market are connected to financial and marketing strategies (Che Omar et al., 2020).

However, the news of the first few hundred Covid-19 cases only reached us at the beginning of 2020. Malaysia soon decided to implement MCO 1.0, a severe lockdown (Arfa, 2021). The lockout hurt all types of enterprises, especially SMEs, and many were forced to deal with financial issues as a result. A further 8.3% fall compared to a negative 1.7% rise in 2019 was caused by manufacturers who contributed to Malaysia's export income being told to halt operations during the two-month lockdown (Arfa, 2021). As numerous businesses file for bankruptcy, the economy has a direct negative impact (Gamil & Alhagar, 2020). Since Covid-19 causes harm to the global economy, particularly during the initial stages of Covid-19 (Meyer et al., 2021), all economic operations have been halted unless it comes within the vital categories of necessary supplies and medical industries as well as a few essential projects that required to sustain the health system and people's safety (Gamil & Alhagar, 2020).

Besides, Malaysia underwent various less restrictive MCOs, such as Recovery Movement Control Order, (RMCO) and Conditional Movement Control Order, (CMCO) in the months following MCO 1.0, but was compelled to implement a tougher one in January 2021 due to an increase in infection cases. However, due to fewer restrictions, MCO 2.0 did not have the same dramatic effects as MCO 1.0. MCO 2.0 permitted most firms, SMEs, and export manufacturers to remain open to help the economy recover (Arfa, 2021). As a result, it decreased the impact on company owners, allowing them to earn money even while the lockdown was in

effect. Despite this decision, many companies and SMEs continued to struggle to remain sustainable because they were still recuperating from the previous one. Not to mention that many customers and investors are still worried about the economy and choose to save rather than spend, which leads to major decreases in sales and earnings (Arfa, 2021).

Therefore, the Covid-19 pandemic has had an impact on the business sustainability environment, which has had to adapt and endure (Abubakar, 2020; Gregurec et al., 2021). According to research by Dai et al. (2020), the Covid-19 wave closed 18% of SMEs between February and May. While a study by Bartik et al. (2020) also discovered that the Covid-19 epidemic led to widespread closures among SMEs. In conclusion, the Covid-19 pandemic that is wreaking havoc on the world right now is indeed damaging the corporate ecosystem. The next subtopic will cover how the Covid-19 pandemic has negatively impacted the construction business, which is likewise not exempt from this.

3. The Impact of Covid-19 on the Construction Business Survival

Covid-19, which has hit the whole world has indeed harmed construction business survival. Several studies have been conducted to explore the impacts of Covid-19 on the construction business environment. The summary impacts of Covid-19 on construction business survival as shown in Figure 1.



Figure 1. The Impact of Covid-19 on Construction Business Survival

The Covid-19 and MCO outbreaks have caused numerous and substantial disruptions to commercial contracts as well as civil engineering sectors that entail infrastructure and construction contracts, including failures to comply with contract norms and standards. Other than that, precautionary Covid-19 procedures performed during the post-MCO are likely to slow the pace of construction work, requiring projects to be extended in time (EOT) (Syed Zakaria & Singh, 2021& Mohamad Shahril & Kamaruding, 2022). Because of that, it caused delays in projects (Alenezi, 2020; Biswas et al., 2021; Gamil & Alhagar, 2020).

In addition, Covid-19 also affects construction workers where they lose their jobs, construction costs increase, and time overruns as well as have implications on the company's finances (Biswas et al., 2021; Gamil & Alhagar, 2020). Manpower is also a serious issue since many international employees were unable to visit Malaysia or leave their home countries owing to travel restrictions. Many construction businesses and

contractors had to contend with labor scarcity because of limitations on the admittance of foreign workers (Biswas et al., 2021; Gamil & Alhagar, 2020; Mohamad Shahril & Kamaruding, 2022).

Next, the ecosystem of construction business survival is also disrupted in the context of project delivery, design optimization, and information delivery to stakeholders (Luo et al., 2020). Because of Covid-19, construction work on construction sites and the construction project completion process were disrupted (Kabiru & Yahaya, 2020). Construction business ecosystems such as supply chain management, transportation problems, and contractual implication problems are also among the effects of the Covid-19 pandemic (Biswas et al., 2021). Then, most construction companies particularly SMEs are dealing with some issues, including transportation difficulties decreased demand, supply chain delays, cancellation of export orders, and raw material shortages (Shafi et al., 2020).

Covid-19 has made it difficult for most enterprises, regardless of size, to survive. Small enterprises, on the other hand, confront a considerably more serious scenario due to their financial constraints, client base, and reliance on a few key employees. Small enterprises sometimes have limited access to public financial markets and are more vulnerable to cash flow issues caused by revenue fluctuations. Short-term cash withdrawals surpass short-term cash inflows, causing survival issues (Giunipero et al., 2021). Finally, many construction companies need financial assistance to continue their business because of the Covid-19 pandemic (Zamani et al. (2021).

In conclusion, Covid-19 harms the construction industry. Various challenges were faced by construction company owners to continue to survive throughout the Covid-19 pandemic hit. Therefore, the next subtopic will touch on the business survival strategies that can be implemented by construction companies.

4. Surviving in the Age of Covid-19: Key Strategies for Construction Companies

The impact of the Covid-19 pandemic has been widespread, affecting industries and businesses across the globe. In the construction sector, the pandemic has brought new challenges, including disruptions to supply chains, reduced workforce, and changes in customer behavior. To tackle these challenges, several studies have been conducted to analyze the survival strategies of construction businesses during the pandemic.

According to Biswas et al. (2021), some of the strategies that could be implemented by companies include following the guidelines of the World Health Organization (WHO) and government authorities, maintaining social distancing, and wearing safety equipment on-site. Then, Liguori and Pittz (2020) found that maintaining relationships with customers, effective communication, and a positive culture can help construction companies survive during the pandemic. Companies must maintain effective communication with customers, be transparent, and provide updates on project status to maintain trust.

In addition, to improve business survival, construction companies can implement flexible human resource strategies, increase product diversification, explore new markets, and prioritize learning (Alves et al., 2020). This can include measures such as job sharing, part-time work, and flexible working hours. Flexible human resource strategies aim to increase workers' flexibility and adaptability to changing organizational demands (Chen & Li, 2015). Companies have also been encouraged to focus on health and safety, and enhance their use of technology (Hamidah et al., 2022; Mohamad Shahril & Kamaruding, 2022). Companies have embraced technology to maintain operations and avoid site closures. Remote working, for example, has allowed businesses to continue operations while reducing the risk of exposure to the virus.

Furthermore, Zamani et al. (2021) suggested that construction business owners should always be prepared and understand the effects of the Covid-19 pandemic in more depth to facilitate strategic plans to be taken. At the same time, construction business owners should also always be aware of the financial assistance that will be provided by the government and banks to help the continuity of the business. With that financial assistance given by the government, it can help the companies to survive and continue their business.

To sum up, the survival of construction businesses during the Covid-19 pandemic can be ensured by a combination of strategic measures. Adherence to guidelines from WHO and government authorities, effective communication with customers, flexibility in human resource management, and a focus on technology and health and safety are key factors in ensuring business continuity in these challenging times. Additionally, being prepared and knowledgeable about the impact of the pandemic, exploring new markets, and being aware of financial assistance offered by the government and banks can also play a crucial role in ensuring the survival of construction companies. This summary is shown in Figure 2.



Figure 2. Business Survival Strategies for Construction Companies during Covid-19

4. Conclusion

The review showed that Covid-19 has a detrimental influence on the survival of construction businesses. Even though the unexpected crisis has caused tremendous harm to the global economy, particularly during lockdowns, business survival strategies during Covid 19 among construction companies should be established to prevent more businesses from incurring losses and filing for bankruptcy. Therefore, the literature review summarised various business survival strategies that construction companies may utilize to achieve their goals, increase their ROI, and continue to function in the market during this Covid-19. The business needs to make the necessary actions to keep the organization running during or after a crisis. Some of the key strategies discussed include adhering to the guidelines and regulations set by the World Health Organization (WHO) and the government, such as maintaining social distancing, wearing protective equipment, and providing medical facilities. Then, maintain positive relationships with current customers through effective communication and by always meeting their needs, enhancing the use of technology, placing an emphasis on health and safety, and implementing flexible human resource strategies to increase worker flexibility and adaptability to changing organizational demands. Next, try to increase product diversification, explore new markets, and constantly learn and improve, being well-informed about the impact of Covid-19 on the industry and preparing for it by having well-structured strategic plans in place, being aware of financial assistance provided by the government and banks to support the continuity of the business. In conclusion, the literature review suggests that for construction businesses to survive during Covid-19, it is crucial to implement a combination of these strategies and continuously monitor and adjust their plans to adapt to the changing market conditions.

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Declaration of Conflicting Interests

All authors declare that they have no conflicts of interest.

References

- Abubakar, A. (2020). Coronavirus (COVID-19): Effect and Survival Strategy for Businesses. *Journal of Economics and Business*, 3(2), 661–671. <https://doi.org/10.31014/aior.1992.03.02.229>
- Syed Zakaria, S. A. & Singh, A. K. M. (2021). Impacts of Covid-19 Outbreak on Civil Engineering Activities in The Malaysian Construction Industry: A Review. *Jurnal Kejuruteraan*, 33(3), 477–485. [https://doi.org/10.17576/jkukm-2021-33\(3\)-10](https://doi.org/10.17576/jkukm-2021-33(3)-10)
- Alenezi, T. A. N. (2020). The impact of Covid-19 on Construction Projects in Kuwait. *International Journal of Engineering Research and General Science*, 8(4), 6–9.
- Alves, J. C., Lok, T. C., Luo, Y., Hao, W. (2020). Crisis Management for Small Business during the COVID-19 Outbreak: Survival, Resilience and Renewal Strategies of Firms in Macau. *Research Square*, <https://doi.org/10.21203/rs.3.rs-34541/v1>
- Arfa, A. (2021). *How Has MCO Affected the Malaysian Economy?* <https://university.taylors.edu.my/en/campus-life/news-and-events/news/how-has-mcoaffected-the-malaysian-economy.html>
- Bartik, A. W., Bertrand, M., Cullen, Z., Glaeser, E. L., Luca, M., & Stanton, C. (2020). The impact of COVID-19 on small business outcomes and expectations. *Proceedings of the National Academy of Sciences of the United States of America*, 117(30), 17656–17666. <https://doi.org/10.1073/pnas.2006991117>
- Biswas, A., Ghosh, A., Kar, A., Mondal, T., Ghosh, B., & Bardhan, P. K. (2021). The impact of COVID-19 in the construction sector and its remedial measures. *Journal of Physics:Conference Series*, 1797(1). <https://doi.org/10.1088/1742-6596/1797/1/012054>
- Che Omar, A. R., Ishak, S., & Jusoh, M. A. (2020). The impact of Covid-19 Movement Control Order on SMEs' businesses and survival strategies. *Malaysian Journal of Society and Space*, 16(2), 139–150. <https://doi.org/10.17576/geo-2020-1602-11>
- Chen, J., & Li, W. (2015). The relationship between flexible human resource management and enterprise innovation performance: A study from organizational learning capability perspective. *IFIP Advances in Information and Communication Technology*, 449, 204–213. https://doi.org/10.1007/978-3-319-16274-4_21
- Dai, R., Feng, H., Hu, J., Jin, Q., Li, H., Wang, R., Wang, R., Xu, L., & Zhang, X. (2020). The Impact of COVID-19 on Small and Medium-sized Enterprises: Evidence from Two-wave Phone Surveys in China [El impacto del COVID-19 pequeñas y medianas empresas: evidencia de encuestas telefónicas en China]. *Center for Global Development, September 2020*, 1–23.
- Fashina, A. A., Omar, M. A., Sheikh, A. A., & Fakunle, F. F. (2021). Exploring the significant factors that influence delays in construction projects in Hargeisa. *Heliyon*, 7(4). <https://doi.org/10.1016/j.heliyon.2021.e06826>
- Gamil, Y., & Alhagar, A. (2020). The Impact of Pandemic Crisis on the Survival of Construction Industry: A Case of COVID-19. *Mediterranean Journal of Social Sciences*, 11(4), 122. <https://doi.org/10.36941/mjss-2020-0047>
- Giunipero, L. C., Denslow, D., & Rynarzewska, A. I. (2021). Small business survival and COVID-19 - An exploratory analysis of carriers. *Research in Transportation Economics*, July 2020, 101087. <https://doi.org/10.1016/j.retrec.2021.101087>
- Gregurec, I., Tomićić Furjan, M., & Tomićić-pupek, K. (2021). The impact of covid-19 on

- sustainable business models in SMEs [El impacto de covid-19 en modelos de negocio sostenibles en PYMES]. *Sustainability (Switzerland)*, 13(3), 1–24
- Hamidah, S., Rahman, A., Kamaruding, M., Najwa, F., Nusa, M., Neizam, S., & Dzulkifli, M. (2022). Strengthening the Development of Safety and Health Guidelines During Post-Covid-19 Condition for Construction Site Project. In *Journal of Sustainable Civil Engineering and Technology* (Vol. 1, Issue 1).
- Kabiru, J. M., & Yahaya, B. H. (2020). Can Covid-19 Considered as Force Majeure Event in the Nigeria Construction Industry? *International Journal of Scientific Engineering and Science*, 4(6), 34–39. <http://ijses.com/>
- Kopnina, H. (2017). Sustainability: new strategic thinking for business. *Environment, Development and Sustainability*, 19(1), 27-43. <https://doi.org/10.1007/s10668-015-9723-1>
- Liew, K. (2021). *The impact of the covid-19 pandemic, and the challenges faced by contractors in Malaysia* | Driver Group Plc. 2021. Retrieved November 7, 2021, from <https://www.driver-group.com/en/asia-pacific/news/covid-19-contractors-malaysia>
- Luo, X.; Li, H.; Huang, T.; Skitmore, M. Quantifying hazard exposure using real-time location data of construction workforce and equipment. *J. Construct. Eng. Manage.* 2016;142(8) doi: 10.1061/(ASCE)CO.1943-7862.0001139.
- Meyer, B. H., Prescott, B., & Sheng, X. S. (2021). The impact of the COVID-19 pandemic on business expectations. *International Journal of Forecasting*, October. <https://doi.org/10.1016/j.ijforecast.2021.02.009>
- Mohamad Shahril, N. L., & Kamaruding, M. (2022). The Impacts of Covid-19 on the Construction Business Operation and Strategies to Overcome. *Asian Journal of Research in Business and Management*. <https://doi.org/10.55057/ajrbm.2022.4.2.14>
- Owens, K. A., & Legere, S. (2015). What do we say when we talk about sustainability? Analyzing faculty, staff, and student definitions of sustainability at one American university. *International Journal of Sustainability in Higher Education*, 16(3), 367-384. <http://dx.doi.org/10.1108/IJSHE-06-2013-0055>.
- Shafi, M., Liu, J., & Ren, W. (2020). Impact of COVID-19 pandemic on micro, small, and medium-sized Enterprises operating in Pakistan. *Research in Globalization*, 2. <https://doi.org/10.1016/j.resglo.2020.100018>
- Vyshnavi, J. (2017). Business Continuity and Disaster Recovery Plan for Information Security. *Culminating Projects in Information Assurance*, 44
- World Health Organization. (2020). *Coronavirus disease (COVID-19)*. <https://www.who.int/news-room/q-a-detail/coronavirus-disease-covid-19>
- Zamani, S. H., Rahman, R. A., Fauzi, M. A., & Yusof, L. M. (2021). Effect of COVID-19 on building construction projects: Impact and response mechanisms. *IOP Conference Series: Earth and Environmental Science*, 682(1). <https://doi.org/10.1088/1755-1315/682/1/012049>