

# COMMUNICATION AND FINANCIAL IMPACT ON CONSTRUCTION ONGOING PROJECTS DURING MOVEMENT CONTROL ORDER

## Study at Klang Valley, Malaysia

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### ABSTRACT

Movement Control Order (MCO) is known as one of the Malaysian Government to break the chain of Covid-19. Nevertheless, this action also has impacted many industries in the country. One of the important industries affected is construction. Major impacts found are project delay, communication, and financial impact. Communication impacts are seen at the individual level, and organizational levels. Whilst financial impact can be divided into two namely: cost, and income. This research in-progress intends to investigate the impact of communication and financial on ongoing projects in Malaysia during the Movement Control Order (MCO) phase which happened from March 18, 2020, to 1st November, 2020. The data will be collected from selected G7 contractors registered under Construction Industry Development Board (CIDB) located in Klang Valley, Malaysia. 50 to 100 project managers will be invited to be participants. Validated survey instruments will be adopted and adapted to measure the financial impacts of ongoing projects. The findings will provide ideas and direction for project managers in managing ongoing projects that face unforeseen circumstances.

**Keywords:** *financial impact; communication impact; construction projects; Movement Control Order, ongoing projects*

### INTRODUCTION

Covid-19 pandemic's impact on the world economy was devastating. The massive spread of the virus has led to lockdowns, travel restrictions, and Movement Control Order (MCO) enforced in many countries (Idris, S. 2020, Shah et al. 2020). The construction industry has not been without any challenges impacting its communication, cash flow, and project cost (Hansen, 2020). Numerous projects are completed with communication risks and cost overruns, which could be mitigated by having seamless and comprehensive communication mitigation plans and project financial management (Gara et al., 2022). However, many uncertainties can occur and

affect the projects physically or financially (Ali et al., 2018). The Covid-19 pandemic has significantly impacted construction projects in Malaysia. The Movement Control Order (MCO) has contributed delay in the project completion (Zamani et al., 2021). Project Communication Management and Project Financial Management are essential in project success factors and have a major influence on project performance. In terms of finances, the MCO has impacted projects in many aspects. These include cost increment and income loss impact (Sekar, G., Viswanathan, K., & Sambasivan, M. 2018). These impacts have consequently brought negative impacts to contractors in short term as well as in the long term. A number of small contractors closed down their businesses due to communication issues and uncontrollable costs and unsettled debts (Esa, M. B., Ibrahim, F. S. B., & Kamal, E. B. M. 2020). This study aims to propose ideas and direction to project managers to be prepared for any uncertain situation like a pandemic, natural disasters, etc. To assist managers to facilitate better communication and minimize financial risks due to unforeseen circumstances.

## RESEARCH BACKGROUND

Due to the Covid-19 pandemic Malaysian government has multiple actions in order to reduce virus wide spread. One of the action undertaken by our government is to enforce The Movement Control Order (MCO). The MCOs has several types in order to cater different types of situation or phase. Numbers of MCO enforced by the government to address virus spreading issue namely: Movement Control Order (MCO), Enhanced MCO (EMCO), Conditional MCO (CMCO), and Recovery MCO (RMCO) (Esa et al. 2020). Different MCO address different virus spread updates, economic, social, and political situation. MCO restricted most of the main sectors and construction projects one of them. Ongoing projects need to stop their activities on-site to ensure the Covid-19 chain is successfully broken (Gara et al 2022).

MCO has impacted construction industry in term of 2 factors (Rajendran, Y., & Hasmori, M. F. B. 2022). First factor, due to complete restriction of movement nationwide. Therefore, project activities get affected. Second factor, the closing of all government agencies that may be involved in projects' activities. This may delay and increase the cost the of project (Yap, J. B. H., Goay, P. L., Woon, Y. B., & Skitmore, M. 2021).is EMCO only applied within certain areas with high cases of Covid-19. This type of MCO has impacted projects as if projects located at EMCO area it may shortage of resources that frequently supplied inside and outside project sites. Although CMCO and RMCO has reduction in the term of restriction. Construction industry will face adjustment in term of time, scope and cost. This is because, many companies still hesitant to pursue their usual operations. This also happened to government agencies. Consequently projects tasks affected due to limited operations by suppliers, business partners, clients and government agencies that construction companies should liase in the daily, weekly and monthly basis.

In this context of research the MCO enforcement is considered as the main criteria as the period lies between March 18, 2020, to 1st November, 2020. The second criterion is the ongoing projects that currently running when the MCO started. Project management facing challenges and risks in all aspects (Janipha, N. A. I., Zamri, N. F. A. M., & Judi, S. S. 2021). Communication and financial are among major fac-

tors that influence the project success factor (Müllner, J. 2017). As on going projects facing many types of unforeseen circumstances. Covid-19 pandemic is one of major challenge faced by projects since year 2020. Numerous studies investigated the impact of MCO on construction projects in Malaysia. However, studies that explicitly examined the communication and financial impact on ongoing projects are still lacking in number.

Project managers struggled to address risks arising from the unforeseen impact that consequently happened during MCO (Zakaria, S. A. S., & Singh, A. K. M. 2021). The lack of framework and strategies that could assist project managers to respond on communication and financial aspects that could help minimize the risks (Mukhtar, A. M., Mohd Nordin, R., Hashim, N., & Abas, A. A. 2022). The findings of this research could assist project managers and project teams understand the impact of MCO on communication and financial aspects. This could also help them to address smaller scale issues efficiently and effectively.

Communication and coordination of projects are always challenging to project managers. However, it is more challenging during MCO. Communication impacts were found by Hana et al. (2020) at individual levels and organizational levels. The study suggested that Human Resource Departments or Project Managers could strategize on solutions for better communication from individual and to the organizational level to minimize risks and challenges. Fateh, M. A. M., & Zamri, D. A. (2022) suggested that setting clear communication may minimize the challenges faced by project teams. Subramaniam et al. (2022) quoted that miscommunication is the major issue found in communication.

Miscommunication will lead to other problems like deficiency of work, inaccurate reports and etc. The study suggested analyzing miscommunication by assessing communication barriers. These communication barriers include: distorted information, usage of technical jargon, unclear communication channel, language barrier, late information dissemination, lack of necessary skills, multi-cultural work environment, and personality factors. These barriers are discussed by previous studies and critical aspects for project performance and success. Arandas, Loh, & Chiang (2021) have similar findings. This study found misinformation, disinformation, infodemic consequently have negative impacts on good communication between individuals. Infodemic and communication breakdown may jeopardize projects' performances and success (Subramaniam et al. 2022, Subramaniam et al. 2021). Several mechanisms to support and set clear communication could be incorporated into all projects. During the MCO project teams were forced to shift from conventional communication to online communication. Due to a lack of two-way communication issues and conflicts arise from time to time. Project team members' productivity and motivation decreased (Azlan and Suratkon 2022, Suratkon and Azlan 2021). Therefore, this study will propose a good communication mechanism to reduce the number of risks pertaining to communication barriers. Summary of communication impact based systematic literatures review is presented in the following Table 1

**Table 1: Project Communication aspects impacted by the Covid-19 pandemic**

Communication Impact	References
<p><b>Individual</b></p> <ul style="list-style-type: none"> <li>• inefficient communication and documentation handover difficulty</li> <li>• Reduction in productivity</li> <li>• Blurring of Job and Personal Life Boundaries</li> <li>• Reduce 2-way communication arise challenges in work independently</li> <li>• Lack of skills in the usage of communication tools</li> <li>• Distractions and noise</li> <li>• Language barriers</li> </ul>	<p>Ibrahim, Esa, &amp; Kamal, (2022), Norzaki, &amp; Masrom, (2022), Hana et al. (2022), Fateh, &amp; Zamri (2022), Arandas, Loh, &amp; Chiang, (2021), Janipha, Zamri, &amp; Judi (2021), Subramaniam et al. (2022), Subramaniam et al. (2021), Khan et al. (2022), Bakar et al. (2022). Othman, &amp; Ishak, (2021).</p>
<p><b>Project/organization</b></p> <ul style="list-style-type: none"> <li>• Communication and Coordination</li> <li>• Lack of communication tools in short notice action</li> <li>• Lack of expertise in the usage of communication tools</li> <li>• Information Security Risk</li> <li>• Unclear Performance Metrics</li> </ul>	

M.B. Esa et al. (2020) highlighted that one of the impacts of project success in Malaysia (Klang Valley) construction projects during the pandemic is an ‘increase in development cost’. This issue is categorized as having negative consequences that could be understood by project teams. This finding is supported by the study conducted by Kamarazaly et al. (2020). The construction industry has impacted contractors’ cash flow. In critical times like the pandemic, the company should efficiently control cost variance. This is because it is common for a project to occur cost overrun.

Upon the literature review process, this study discovered several aspects of project financial management in Malaysia’s construction industry discussed by previous literature. These financial aspects are presented in the following Table 2:

**Table 2: Project Financial Management aspect impacted by the Covid-19 pandemic**

Communication Impact	References
<p><b>Cost</b></p> <ul style="list-style-type: none"> <li>• Increase cost of labor, material, machinery, production, logistics, plants, etc.</li> <li>• Increase in disputes and claims</li> <li>• Additional/miscellaneous cost incurred, RTK, PCR test for workers, hygiene equipment, unexpected legal/penalty, etc.</li> <li>• cost of foreign workers such as food, shelter, and COVID-19</li> </ul>	<p>Sekar, G., Viswanathan, K., &amp; Sambasivan, M. (2018), Esa et al. (2020), Mukhtar et al. (2022), Gara et al., (2022), Olanrewaju et al (2021), Zakaria, S. A. S., &amp; Singh, A. K. M. (2021)</p> <p>Jagun, Z. T., Nyakuma, B. B., Daud, D., &amp; Samsudin, S. (2022) Yap, J. B. H., Goay, P. L., Woon, Y. B., &amp; Skitmore, M. (2021), Riza, N. M. M., Latiff, M. F. H. A., &amp; Hamzah, M. A. (2022), Rajendran, Y., &amp; Hasmori, M. F. B. (2022)</p>
<p><b>Income</b></p> <ul style="list-style-type: none"> <li>• loss of profits</li> <li>• loss of cost performance due to shortage of labor etc.</li> </ul>	

## METHODOLOGY

In the early phase of this study, a systematic literature review with the grounded theory method was to ensure the pre-defined extraction of linkages between different papers. This is to ensure that the theoretical study will achieve a holistic coverage and meaning associated with project management as well as a thorough analysis of project communication and financial management.

This will be followed by the primary data collection from respondents in the construction industry where the sample group will complete distributed questionnaires through online platforms, including social networking sites. The targeted group of data is only on the ongoing projects in Malaysia that started before the MCO imposition and are expected to finish within the MCO period or after MCO is lifted. The selection of projects shall only be taken from the public awarded projects which are executed by selected contractor G7 registered under Construction Industry Development Board (CIDB).

Quantitative data will then be analyzed using analysis tools with data collected from the distributed questionnaire to the targeted respondents. The questionnaire will be based on 5 points Likert scale. The participant will be asked to evaluate the listed criteria with 1 = Strongly Disagree to 5 = Strongly Agree. The data collected will be analyzed to understand impact factors and recommend relevant strategies.

## RESULT AND DISCUSSION

Upon systematic literature review, several factors in communication and financial were found to be the impact of the MCO on ongoing projects (Sekar, G., Viswanathan, K., & Sambasivan, M. 2018). These factors include 1) 2) cost and income (Jagun, Z. T., Nyakuma, B. B., Daud, D., & Samsudin, S. 2022). These 2 major impacts include several discussions that can be explained as existing cost increment and income reduction, and unexpected cost increment and loss of income (Olanrewaju, A., AbdulAziz, A., Preece, C. N., & Shobowale, K. 2021).

However, these findings should be tested empirically to further understand the real situation for ongoing projects during MCO. The results will enhance the understanding of the impact factors, risks, and threats associated with the pandemic.

Project management comes with numerous knowledge areas to be grasped by project managers (Riza, N. M. M., Latiff, M. F. H. A., & Hamzah, M. A. 2022). Project communication and financial management are key areas that shall be comprehensively observed by project managers due to their importance to project success (Md Radzi, N., Alauddin, K., & Mohd Derus, M. 2022). Based on the current findings this study will propose strategies for project managers. These recommendations will generally be classified as: setting up clear communication strategies, financial aid, risk contingency plans, and response mechanisms (Zamani, S. H., Rahman, R. A., Fauzi, M. A., & Yusof, L. M. 2021).

In the communication aspect, recommendations for improvement include individual-psychological strategies, and organizational levels for mitigation, and recovery (Khan et al. 2022). For the individual project team, it is suggested to have a clear set of communication settings on a daily, weekly, and monthly basis. Several recommendations that could be executed are: setting goals and preparing to-do list, innovative business model adoption, employee suggestion scheme, and resource

breakdown structure (Subramaniam et al. 2021).

Some of the mitigation plans that organizations or projects can adopt are Communication Efficacy Measure. These preventive measures focus on communication evaluation based on several criteria. The criteria comprise Clarity, Specificity, Completeness, Barriers, Timeliness, and Processes. Azlan, & Suratkon (2022) quoted that Internet of Things (IoT) could be one of mitigation action to communication risks. IoT is potential tool to control and coordinate communication remotely. This can be done by using meeting platforms like Cisco WebEx, building information modelling (BIM), and 3D printing in project activities.

In terms of financial aid, this study suggested grants, funding, and loans recovery plans for companies facing financial crises. This can be implemented with the collaboration of the Malaysian government together with Non-Governmental Agencies (NGOs) and Bank Negara Malaysia (BNM). A good plan package and the campaign could be done to address financial issues such as cost overrun.

Secondly, this study recommends for a risk contingency plan that assists construction companies to examine risks and minimize risks. King et al (2021) and Zamani et al., (2021) proposed legal, productivity, and the environmental mechanisms that associated with risks as solutions to Covid-19 impacts. Government and NGOs support on shortage of material to increase productivity, issue in the environments and problem-solutions plan on legal issues such as contract issue that related to Extension of Time (EOT).

Finally, a response mechanism could be incorporated by contractors. This mechanism could be strategically listed by the Malaysian Government pertaining to Standard of Operating Procedures (SOP) and policies (King, S. S., Rahman, R. A., Fauzi, M. A., & Haron, A. T. 2021)

## CONCLUSION

In the nutshell, the findings of empirical data will provide new ideas and direction to project managers in construction industries to understand further the unforeseen circumstances that may arise from MCO that is enforced by authorities. This MCO can be due to a pandemic or any other similar threats. Consequently, project managers can address the smaller risks to overcome the cost increment. Simultaneously, to study and understand the bigger risks and plan the solutions or strategies to minimize the risks. These research findings also enhance the research works in understanding and enhancing project management that specifically focuses on construction industries in Malaysia.

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