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# QUANTITY SURVEYORS' WORK PERFORMANCE IN THE POST COVID-19 PANDEMIC

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#### **ABSTRACT**

The COVID-19 pandemic has severely impacted various businesses, including the construction industry. Quantity surveyors, who are experts in cost and contract management, have faced challenges in adapting to the post-pandemic work environment. This will lead to less productivity of work and the organisation's performance. Therefore, the purpose of this study is to suggest the strategies in enhancing the quantity surveyors' work performance level after COVID-19 pandemic. This study employed a quantitative method by distributing a questionnaire survey to quantity surveyors in the Selangor area. Questionnaire survey were distributed to 176 respondents with 92.05% of questionnaire returned rate. Data was collected and analysed using the Statistical Package for the Social Sciences (SPSS). The evaluation of the data revealed that the ability to communicate directly with colleagues and organization members is the most significant factor affecting quantity surveyors' work performance after COVID-19. Additionally, providing better working conditions and environments is the most effective strategy for enhancing quantity surveyors' work performance post-pandemic. These findings can assist current and future quantity surveyor firms in understanding the variables that influence work performance, thereby improving the work performance levels of quantity surveyors during the post-COVID-19 pandemic.

**Keywords:** quantity surveyor, work performance, covid-19 pandemic, strategies

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#### INTRODUCTION

The construction industry is one of the most important industries in terms of societal growth (Alaloul et al., 2021). Stasiak-Betlejewska and Potkany (2015) considered the construction industry as a complex sector of the economy that encompasses a wide range of stakeholders and has broad-ranging connections with other extents of activity such as manufacturing and energy usage, finance, materials, equipment, and labour. Ogunnusi et al. (2020) stated that the breakout of an unexpected pandemic-tagged COVID-19 has brought the whole planet to a shutdown since 2019. This pandemic had an impact not only on human health but also on the operational health of businesses and organizations, including the construction sector. Driver Trett (2021) revealed that the construction sector in Malaysia, as well as other industries, was badly impacted by the COVID-19 plague.

In addition, the Covid-19 pandemic caused several problems and issues. Globally, the construction business is known for its high levels of job stress (Kamardeen, 2021). All parties involved in the construction industry, from the on-site construction workers to the office-based staff, must have their own work pressure, especially the construction project professionals such as quantity surveyors (Chan et al., 2020). As the quantity surveyor's scope of work is quite broad, this necessitates consistency in order to meet the goal and ensure that it is finished on time, within budget, and according to specifications. Hence, they are obliged to work extra time since they are exposed to heavier workloads.

According to Alsharef et al., (2021), the construction industry, like other industries, has been affected by the pandemic in a variety of ways. Following the commencement of the pandemic, the number of construction jobs available decreased. According to Pamidimukkala et al. (2021), the coronavirus 2019 (COVID-19) has a significant impact on employees and businesses all around the world. It has drastically transformed the employment environment, raising workers' worries about economic uncertainty, mental health and physical well-being, loneliness, the problems of working remotely, and securely returning to work. work stress occurs when a person is dealt with bad physical and psychological situations known as workplace stressors and does not have the resources such as skills, knowledge, time or support to deal with them (Kamardeen, 2021). Consequently, this also affected on the changes in work culture due to the Covid-19 infection further increased the pressure on quantity surveyor.

Accordingly, the purpose of this study is to suggest the strategies of enhancing quantity surveyors' work performance level after COVID-19 pandemic. It is hoped that by establishing the objective may help in the achievement of the main purpose of this research.

#### LITERATURE REVIEW

Development of the nation depends on the construction sector's ability to generate income and raise living standards in the country (Khan et al., 2014). However, it has long been acknowledged that the construction industry is a sophisticated, high-pressure, and possibly dangerous workplace that is filled with many risks (Adewale & Adhuze, 2017). Besides, the construction site is closely related to the construction industry which is a very important place for construction activities.

Pamidimukkala et al. (2021) stated that the Coronavirus 2019 (COVID-19) has had a significant impact on employees and businesses all around the world. It has drastically transformed the employment environment, raising workers' worries about economic uncertainty, mental health and physical well-being, loneliness, the problems of working remotely, and securely returning to work. COVID-19 has also had an influence on job-related elements that affect the workplace's variety and dynamic character. In addition, work stress occurs when a person is dealt with bad physical and psychological situations known as workplace stressors and does not have the resources such as skills, knowledge, time or support to deal with them (Kamardeen, 2021).

Futhermore, Bevan (2012) stated that work performance has a major effect on the revenue of any company. Work performance is defined as the overall expected value to an organization of the discrete behaviour actions that an individual performs over a regular time period. It is essential to comprehend the relationships between work performance, people, and situational factors in order to be more effective at work (Kahya, 2009). According to Yusof et al. (2013) mentioned that motivation is a key aspect in influencing individual behaviour and performance. Work motivation is a critical feature that determines the quality and content of job outcomes (Toode et al., 2011). Several studies regarding workplace motivation show that it promotes worker productivity, motivation, and engagement (Ghazanfar et al., 2011). According to Sansone & Harackiewicz (2000), motivation steers behaviour towards the achievement of a set target.

The are many factors that influence the work performance of an individual. According to Harris (2002), work restrictions are the self-image of the work environment that negatively affect job performance. Employee performance in any business has a major effect on the entire performance of the organisation, either good or poorly (Tarmidi and Arsjah, 2019). According to Stewart (2010), organizational culture standards and values have a profound effect on individuals who are either directly or indirectly connected with the organisation. These standards are intangible, yet they have a significant influence on employee performance and earnings.

Lane et al., (2010) stated that working environment has several factors such as salaries, working hours, worker autonomy, organisational structure, and relationships between employees and management that may have an impact on work satisfaction. This also supported by Bakotic & Babic (2013) where they observed that workers who work under difficult working conditions are unsatisfied because working conditions are a key role in job satisfaction. According to Brown (1995), teamwork can have an impact on performance outcomes and organisational goals. This statement is also

supported by Jiang (2010) since teamwork can lead employees to share the same goals and responsibility for outcomes, particularly the organization's common goal.

Availability of sophisticated information and communication technology, appropriate furniture, and digital team resources will result in a more effective use of space and other facilities which leading in improved organisational and employee efficiency (Van Der Voordt, 2004). In addition, Sageer et al., (2012) stated that one of the primary factors influencing satisfaction with work in an organisation is the availability of internet and other technologies in the workplace. Mathauer & Imhoff (2006) explained that when a worker meets certain initial targets, they recognise the clear correlation between effort and outcomes, which motivates them to continue performing at a high level. This finding is also agreed by Ganta (2014) where he stated that when objectives are clear and focused, it signifies that individuals have a determined target or objective to strive for.

People are more inclined to feel competent and confident in their skills when they are assigned tasks that match their abilities, which leads to increased motivation and enhanced their performance (Peng & Hsieh, 2012). This also supported by Hamari et al., (2018) is his studies that explained assigning tasks that match individuals' abilities increases their sense of competence and confidence, which boosts their motivation and performance. Furthermore, in Ganta (2014) research, it is well explained that employers that recognise their employees by evaluating their development and offering feedback on how they have grown over time might help them generate high-quality work. Xing et al., (2023) also stated that the employees are motivated to improve their performance when they get feedback that shows the gaps between their performance and goals.

Asaari et al. (2019) stated that promotion is a significant component in an employee's life and career, and it may have an impact on their motivation. Furthermore, according to Rahman and Hoque (2014), there are five work factors that are critical for an employee's motivation. It comprises of the work itself, salary, promotion prospects, supervision, and coworkers. Incentive provides a platform that allows companies to incentivize their staff to increase productivity (Pouliakas, 2010). Daniel (2019) describes incentives as various rewards given based on differences in accomplishing of certain results, often known as a stimulus to increased activities. Incentives are hence work motivations.

Workshops or training are beneficial to the workers to upgrade their skill. Chandrasekar (2011) explained that skills necessary include the ability to engage staff in cooperative goal planning, establish role requirements, and offer frequent performance feedback. Elnaga & Imran (2013) also stated that training and development programmes that are effective in boosting employee performance.

#### RESEARCH METHODOLOGY

Quantitative method is the technique utilized in this study. Simple Random Sampling is employed as a sampling technique. Simple random sampling is applied for populations that are comparatively similar where the members of the research are randomly selected to participate in the research (Bhardwai, 2019). Furthermore, in this method, researchers create a numerical list of all sample sizes and use a computer tool to generate random numbers when dealing with big sample sizes which provides them with a population list for the desired research topic (Omair, 2014). The respondents were among the quantity surveyors based in Selangor. This study was conducted in the Selangor area since Selangor ranked first among the three main states contributing to RM15.1 billion or 54.6% value of construction work done in quarter four of 2021, according to the Department of Statistics Malaysia (2022). This shows the construction industry in Selangor has grown rapidly, especially in the development of industrial buildings, residential housings and infrastructures. The total population used is 500 quantity surveyors. The sample size was calculated using a Raosoft sample size calculator resulting the total number of quantity surveyors in Selangor for this research sample size is 176. A total of 176 sets of questionnaire surveys were distributed to the targeted quantity surveyors based in Selangor by using online questionnaire survey through Email and Whatsapp message. However, only 162 feedback responses were received out of 176 sets distributed to the respondents. The Statistical Package for Social Science (SPSS) software was used to analyse the data.

#### FINDINGS AND DISCUSSION

The questionnaire survey were distributed through email and whatsapp message. However, out of 176 sets distributed to the respondents only 162 feedback responses were received which contributes 92.05% to the response rate. According to Fincham (2008), the objective of researchers should be to have a survey response rate of around 60% for the majority of research studies. As a result, the data gathered for this study may be regarded acceptable.

Table 1: Mean and Rank for Strategies to Improve the QS Work Performance Level After Covid-19 Pandemic.

Strategies to Improve The Qs Work Performance	Mean	Std. Deviations	Rank
Provide a better working conditions and	4.80	.457	1
environment			
Encourage team collaboration	4.79	.438	2
Provide the best software for use by QS	4.78	.456	3
Keep goals clear and focused	4.78	.473	4
Match tasks to people who match the skills	4.78	.473	5
Always give each other feedback	4.78	.473	6

Offer promotions based on work performance	4.76	.496	7
Incentivize employees	4.76	.520	8
Organizing for workers with less IT expertise to	4.75	.490	9
attend workshops			

Note: Below 1.00 - 1.50 = Strongly Disagree (SD), 1.50 - 2.50 = Disagree (D), 2.50 - 3.50 = Undecided (UD), 3.50 - 4.50 = Agree (A), 4.50 - 5.00 = Strongly Agree (SA)

Table 1 shows the list of rank, mean index and standard deviation for the strategies to improve the QS work performance level after Covid-19 pandemic. The highest rank is 'provide a better working conditions and environment' (mean=4.80). Proceed with 'encourage team collaboration' (mean=4.79) and then 'provide the best software for use by QS' (mean=4.78). Meanwhile, 'keep goals clear and focused', 'match tasks to people who match the skills' and 'always give each other feedback' showed a same mean score at 4.78 and standard deviation at .473. Next, 'offer promotion based on work performance' and 'incentive employees' showed a same mean score (mean=4.76). Lastly, the lowest rank is 'organizing for workers with less IT expertise to attend workshop' (mean=4.75).

Similar findings have been observed in other studies before, which is a study by Holston-Okae et al. (2018) found that working conditions affected people's sense of achievement in themselves and their jobs. Lane et al., (2010) stated that working environment has several factors such as salaries, working hours, worker autonomy, organisational structure, and relationships between employees and management that may have an impact on work satisfaction. Several researchers; Brown (1995); Jiang (2010) agreed that encourage team collaboration can give an impact on performance outcomes and organisational goals. Additionally, Sageer et al., (2012) stated that one of the primary factors influencing satisfaction with work in an organisation is the availability of internet and other technologies in the workplace. People's feeling of accomplishment in themselves and their job is greatly influenced by the environment wherein they work.

Organisations may build a work environment that fosters and improves quantity surveyor performance through implementing those strategies. It is critical to adjust these strategies to the organization's particular objectives and goals and to evaluate their performance on a regular basis. Organisations may optimise their performance and contribute to the overall success of the company by always seeking to enhance work culture and assist quantity surveyors.

#### CONCLUSION

The objective of this research had been accomplished by ranking of means for each of the strategy variables given. It can be summarised that the strategies to improve the QS work performance level after the pandemic are providing a better working conditions and environment, team collaboration encouragement and providing the best software for use by QS accordingly. This research analysis revealed that providing a better working conditions and environment is the best strategy selected by the respondents in order to enhance quantity surveyor work performance level.

Better working conditions and environments are preferable as they increase job satisfaction, improve mental and physical well-being, stimulate cooperation and teamwork, eliminate distractions, promote work-life balance, and also attract and retain top talent. Therefore, it is convinced that a better working conditions and environments is significant for an organisation particularly quantity surveyor firms to develop a healthy work culture that optimises quantity surveyor work performance. While the research on quantity surveyor's work performance in the post Covid-19 pandemic is significant, there is also a necessity to expand research to other construction personnels that related to the construction industry.

#### REFERENCES

- Adewale, P. O., & Adhuze, O. O. (2017). Knowledge and practice of occupational hazard control among building construction workers in Lagos Metropolis, Nigeria. International Journal of Advances in Engineering & Technology, 10(4), 512.
- Alaloul, W. S., Musarat, M. A., Liew, M. S., Qureshi, A. H., & Maqsoom, A. (2021). Investigating the impact of inflation on labour wages in Construction Industry of Malaysia. Ain Shams Engineering Journal, 12(2), 1575-1582.
- Alsharef, A., Banerjee, S., Uddin, S. M., Albert, A., & Jaselskis, E. (2021). Early impacts of the COVID-19 pandemic on the United States construction industry. International journal of environmental research and public health, 18(4), 1559.
- Asaari, M. H. A. H., Desa, N. M., & Subramaniam, L. (2019). Influence of salary, promotion, and recognition toward work motivation among government trade agency employees. International Journal of Business and Management, 14(4), 48-59.
- Bakotic, D., & Babic, T. (2013). Relationship between working conditions and job satisfaction: The case of Croatian shipbuilding company. International journal of business and social science, 4(2).
- Bevan, S. (2012). Good work, High performance and productivity. The paper prepared for the European HRD Forume, Lisbon, (2012).
- Bhardwaj, P. (2019). Types of sampling in research. Journal of the Practice of Cardiovascular Sciences, 5(3), 157.
- Brown, D. I. (1995). Team- based reward plans. Team Performance Management: An International Journal, 1(1), 23-31.

- Chan, A., Nwaogu, J. and Naslund, J. (2020), "Mental ill-health risk factors in the CI: systematic review", Journal of Construction Engineering and Management, Vol. 146 No. 3.
- Chandrasekaran, D. R. G. (2011). A Critical Study on Creation of Knowledge Management System. Available at SSRN 1909191.
- Chen, Z. (2021). Influence of working from home during the COVID-19 crisis and HR practitioner response. Frontiers in psychology, 12, 4177.
- Daniel, C. O. (2019). Effects of incentives on employees productivity. International Journal of Business Marketting and Management, 4(1).
- Elnaga, A., & Imran, A. (2013). The effect of training on employee performance. European journal of Business and Management, 5(4), 137-147.
- Fincham, J. E. (2008). Response Rates and Responsiveness for Surveys, Standards, and the Journal. The American Journal of Pharmaceutical Education, 72(2), 43. https://doi.org/10.5688/aj720243
- Ganta, V. C. (2014). Motivation in the workplace to improve the employee performance. *International Journal of Engineering Technology, Management and Applied Sciences*, 2(6), 221-230.
- Ghazanfar, F., Chuanmin, S., Khan, M. M., & Bashir, M. (2011). A study of relationship between satisfaction with compensation and work motivation. International Journal of Business and Social Science, 2(1).
- Harris, M. (2002). Human Resource Management: A Practical Approach, (2nd ed.). Orlando: Harcourt Int.
- Holston-Okae, B. L., & Mushi, R. J. (2018). Employee turnover in the hospitality industry using Herzberg's two-factor motivation-hygiene theory. International Journal of Academic Research in Business and Social Sciences, 8(1), 218-248.
- Jiang, X. (2010). How to motivate people working in teams. International Journal of business and Management, 5(10), 223.
- Kahya, E. (2009). The effects of job performance on effectiveness. International Journal of Industrial Ergonomics, 39(1), 96-104.
- Kamardeen, I. (2021). Work stress related cardiovascular diseases among construction professionals. Built Environment Project and Asset Management.

- Khan, R. A., Liew, M. S., & Ghazali, Z. B. (2014). Malaysian construction sector and Malaysia vision 2020: Developed nation status. Procedia-social and behavioral sciences, 109, 507-513.
- Lane, K. A., Esser, J., Holte, B., & McCusker, M. A. (2010). A study of nurse faculty job satisfaction in community colleges in Florida. Teaching and Learning in Nursing, 5(1), 16-26.
- Mathauer, I., & Imhoff, I. (2006). Health worker motivation in Africa: the role of non-financial incentives and human resource management tools. Human resources for health, 4(1), 1-17.
- Ogunnusi, M., Hamma-Adama, M., Salman, H., & Kouider, T. (2020). COVID-19 pandemic: the effects and prospects in the construction industry. International journal of real estate studies, 14(Special Issue 2).
- Omair, A. (2014). Sample size estimation and sampling techniques for selecting a representative sample. Journal of Health specialties, 2(4), 142.
- Pamidimukkala, A., Kermanshachi, S., & Jahan Nipa, T. (2021, June). Impacts of COVID-19 on health and safety of workforce in construction industry. In International Conference on Transportation and Development 2021 (pp. 418-430).
- Peng, W., & Hsieh, G. (2012). The influence of competition, cooperation, and player relationship in a motor performance centered computer game. Computers in Human Behavior, 28(6), 2100-2106.
- Pheng, L. S., & Chuan, Q. T. (2006). Environmental factors and work performance of project managers in the construction industry. International journal of project management, 24(1), 2437.
- Pouliakas, K. (2010). Pay enough, don't pay too much or don't pay at all? The impact of bonus intensity on job satisfaction. Kyklos, 63(4), 597-626.
- Rahman, M. M., & Hoque, M. M. (2014). An analysis of employee job satisfaction: A study on united commercial bank limited. International Journal of Ethics in Social Sciences, 2(2), 1-15.
- Robbins, S. P., & Judge, T. A. (2009). Organizational Behaviour: International Version, 13/E. E: Pearson Higher Education.
- Sageer, A., Rafat, S., & Agarwal, P. (2012). Identification of variables affecting employee satisfaction and their impact on the organization. IOSR Journal of business and management, 5(1), 32-39.

- Sansone, C., & Harackiewicz, J. M. (Eds.). (2000). Intrinsic and extrinsic motivation: The search for optimal motivation and performance. Elsevier.
- Shafie, H., Khuzzan, S. M. S., & Mohyin, N. A. (2014). Soft skills competencies of quantity surveying graduates in Malaysia: employers' views and expectations. International Journal of Built Environment and Sustainability, 1(1).
- Stewart, D. (2010). Growing the corporate culture. Obtained from https://www.wachovia.com/foundation/v/index.jsp.
- Tarmidi, D. and Arsjah, R. (2019). Employee and Organizational Performance: Impact of Employee Internal and External Factors, Moderated by Online Application Journal of resources development and management, 57, 30-37. Technology CES Kaduna Polytechnic Journal, 1(2), 35-42.
- Toode, K., Routasalo, P., & Suominen, T. (2011). Work motivation of nurses: A literature review. International journal of nursing studies, 48(2), 246-257.
- Van Der Voordt, T. J. (2004). Productivity and employee satisfaction in flexible workplaces. Journal of Corporate Real Estate, 6(2), 133-148.
- Xing, L., Sun, J. M., Jepsen, D., & Zhang, Y. (2023). Supervisor negative feedback and employee motivation to learn: An attribution perspective. human relations, 76(2), 310-340.
- Yusoff, W. F. W., Kian, T. S., & Idris, M. T. M. (2013). Herzberg's two factors theory on work motivation: does its work for todays environment. Global journal of commerce and Management, 2(5), 18-22.

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