

Challenges of Quantity Surveyors in Klang Valley to Work from Home

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ABSTRACT

With the uprising trend of modern management systems adoption, the enthusiasm for corporates to exercise the working culture of work from home are seemingly proliferated to fit in the recent corporate world. However, the published research papers and statistics regarding the information and comprehension of quantity surveyor to work from home are unexpectedly sporadic. Therefore, this research reviews the insights of quantity surveyor to work from home while drawing discussion and conclusion on the uprising challenges of work from home for quantity surveyors to execute their roles. The paper compiles the responses obtained from the methodology of surveying 145 related professions in construction industry around Klang Valley area. The questionnaire was designed with five-point Likert scale, and the data was analyzed by using SPSS software. The study displayed reduced supervision and direction as the greatest challenge, followed by significant challenges which include communication and coordination challenges, organization performance and productivity, job performance and productivity, and unclear performance metrics. Hence, personnel in the industry should be aware of the potential challenges of a quantity surveyor to work from home due to their roles, in order to indicate the potential effects that may incur to the individual and organization.

Keywords: Quantity surveyor; work from home; challenges; Klang Valley; SPSS

INTRODUCTION

Construction sector in Malaysia is an outstanding productive sector and playing a crucial role in Malaysia economy. Long working hours and weekend jobs are common in the construction sector. As a result, construction employees face difficulties to find a balance between their working and personal life (Lingard et al. 2005). As the number of quantity surveying firms in the nation rises, it reveals that they play a significant role in the Malaysian construction industry as it offers a rising share of overall industrial production and employment. Quantity surveying field has to adapt the corporate culture of the organization (Langford et al. 2001). Work from home is regarded as one of the new business cultures for quantity surveying companies to implement and expect to thrive in the building industry. This is due to the fact that the competitive market has a strong impact on quantity surveying companies in the procurement and bidding of projects.

A new severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) illness epidemic developed in Wuhan, China, in December 2019. The World Health Organization (WHO) dubbed this condition coronavirus illness (COVID-19) (World Health Organization 2020). Malaysia's Prime

Minister, Tan Sri Muhyiddin Yassin, stated that the entire country will be focused on enforcing the movement control order (MCO) commencing on March 18, 2020, in order to prevent and control the spread of COVID-19. Except for some necessary services, this order limited the opening of public and private premises. As the result, many employees started to work from home. However, work from home has not been a popular culture in Malaysian construction industry due to its nature of work before the pandemic. Consequently, the research that relates construction industry professions and the work from home culture is nevertheless inadequate and scarce.

Therefore, this study is carried out to focus on some estimates of work from home for quantity surveyors in Klang Valley. The study particularly reviews on the mindfulness and challenges of quantity surveyors in Klang Valley to work from home due to their roles in construction project, eventually, drawing a conclusion on the plausibility of working from home as the 'new normal' in quantity surveying field.

In short, this research is intended to provide organizations and the construction industry with a deeper understanding of the challenges incurred with the implementation of the working from home culture. The findings aim to design an

optimal workplace environment for employees and long-term benefits for corporate development on the basis of challenges and effects.

METHODOLOGY

This research was conducted by distributing questionnaire survey in order to collect adequate amount of data. The questionnaire was designed with Five-point Likert scale which enables the respondents to specify their level of agreement to a statement typically in five points: Strong Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), Strongly Agree (5). A Likert scale is a type of psychometric response scale that is often adopted in surveys to measure the interests of respondent or level of agreement with a statement or sequence of answers. Likert scales were used in this study to offer a range of answers to a statement or sequence of assertions. The challenges are separated into Individual Challenges (six challenges) and Organization Challenges (three challenges), to identify the challenges faced by quantity surveyor and by the company when the quantity surveyors are working from home.

The research analysis is limited specifically within Kuala Lumpur, Cheras, Shah Alam and Klang area which are in the conurbation of Klang Valley, Malaysia. The scope of the research is limited to individuals from the construction industry that involve professional interactions with Quantity Surveyor during their work, including Quantity Surveyors from different corporate level. The volunteers are targeted to be professionals from different level in respective corporate, which may include entry level, managerial level and executive level personnel from developers, architectural firms, consultancies, contractors and suppliers. Different level of professionals in the industry may provide different perspectives to the questionnaire-based study (Regmi et al. 2016). 200 sets of questionnaires were distributed to the public and the volunteers were asked to complete the questionnaire in order to evaluate and analyze the data, ultimately to meet the objectives of the research. The questionnaire survey is expected to be completed in less than 15 minutes. Due to the Covid-19 outbreak in Malaysia, face-to-face data collection method is not recommended. Thus, the questionnaire is prepared and distributed via WhatsApp, Messenger and Facebook applications to all parties in form of Google Form.

To explain the statistics, the data obtained from questionnaire forms will be evaluated using Microsoft Excel under Microsoft Office Professional Plus 2019 and the Statistical Package for Social Science (SPSS) under IBM SPSS Statistics 21 applications. The descriptive analysis is applied to summarize the data from the respondents. Tables, charts, graphs, and numerical representations of the data are used to interpret the data. The results would be divided into percentages and classified according to the

themes using the means. Tests were carried out to determine the reliability of the survey questionnaire, including the Cronbach Alpha technique, descriptive statistical analysis, and percentage and frequency tests using the SPSS software. The acquired data is presented and transformed in a variety of methods and formats, such as tables, histograms, bar charts, pie charts, and figures in this chapter. The Cronbach Alpha test is adopted to analyze the result of questionnaire that is designed using multiple Likert scale statements and thus to decide whether or not the scale is accurate. Value of Cronbach's Alpha which is higher or equal to 0.8 has excellent reliability (George et al. 2015).

RESULTS AND DISCUSSION

The data collected from the respondents through the questionnaire that had been done by the 145 respondents via Google Form. Between May 2021 and June 2021, the survey was conducted and a total number of 200 sets of Google Form questionnaire was distributed to construction related personnel who are employed in Klang Valley area, through WhatsApp application and email. 145 responses were acquired from professionals working in developer companies, architecture firms, engineering consultancies, quantity surveying firms, contractor companies and others. The analyzed data is then discussed and elaborated, emphasizing on the objective which is the challenges of a quantity surveyor to work from home due to their roles. The Statistical Package for Social Science (SPSS) and Microsoft Excel are used to analyze the data in order to identify the research objectives. The data analysis will be carried out in many component sequences in order to be analyzed methodically. The Table 1 and Table 2 reflect the mean and standard deviation (SD) of the responses, which reflect the degree of agreement among respondents on the challenges of a quantity surveyor working from home due to their roles. A higher mean score shows that the challenges are more agreed upon by the respondents, whereas the SD reflects the respondents' understanding of the respondents' views at this part of the question. The objective of SD is to identify how the data is distributed: $SD \leq 1$ is consider 68% of the values; $1 < SD \leq 2$ is about 95% of the values; and $2 < SD \leq 3$ represents 99.7 % of the values (Ilola, 2018).

Based on Figure 1 and Table 1, they illustrate and indicate the descriptive statistics of individual challenges of a quantity surveyor to work from home due to their roles. Majority agrees that "Reduced Supervision & Direction" is the individual challenge of a quantity surveyor to work from home due to their roles, which account for the highest mean of 4.15 among the six individual challenges and SD of 0.844. Quantity surveyors that are working from home are fully relying on self-discipline as there is no superior to monitor and supervise physically. This may indirectly affect the job performance and productivity. Since physical contact

is reduced when quantity surveyors are working from home, they are no longer able to get instructed immediately on the direction of the team or organization as the interaction and communication between team leader and members have reduced (Mulki et al. 2011). This may eventually affect the organization performance and productivity in long term. On the other hand, the lowest mean in this entire section is 3.86 and the SD is 0.962 for the challenge of “Employee Isolation”. Working from home alone for long periods may lead to employee isolation, which can be a challenge for people who flourish in social situations. Individuals who work at home will gradually become disconnected from their coworkers and the company community as a whole, which an office environment naturally creates (Mulki et al. 2011).

“Job Performance & Productivity” is the individual challenge that is nearest to the average mean, among the six individual challenges. It has the mean of 4.04 and standard deviation of 0.912. One of the most crucial considerations for companies contemplating the adoption of working from home as a work arrangement by the employer is the employee’s performance and productivity when working from home. Job performance and productivity can be influenced by many factors. As self-discipline, inefficient communication and documentation handover difficulty, and family distractions are correlated with quantity surveyor’s performance and productivity, they may face difficulties on their daily performance and productivity (Nakrošienė et al. 2019; Sullivan et al. 2001).

The rest of the individual challenges, such as “Communication & Coordination Challenges”, has computed the mean of 4.13 and standard deviation of 0.915. One set of certified hard-copy structural element drawings are usually handed over to the quantity surveying consultant as scale reference to carry out measurement/ taking off tasks (Saludin et al. 2015). As a result, if quantity surveyors are situated at their home office, they may face difficulty not only in interacting with project colleagues, but also in obtaining structural element drawings from civil and structural engineers. Furthermore, the challenge of “Distraction” has a certain degree of agreement by the respondent based on the mean of 3.88 and standard deviation of 1.031. Based on Sullivan and Lewis, working from home has a potential distraction to work as work and life have to be integrated at the same time (Sullivan et al. 2001). Different working environment may create a different working atmosphere especially working at home. Unlike office that provides a quiet and concentrated environment and atmosphere, working at home may get distractions from children, spouse, household chores, etc. Subsequently, this will worsen the job performance and productivity of quantity surveyors. Table 1 shows that the “Blurring of Job and Personal Life Boundaries” obtained a mean of 3.87 and standard deviation of 0.892. Work from home also leads to a blurring of job and personal life boundaries, a rise in working hours and

work intensification. As flexibility allows employee to have freedom of choice in adjusting the duration and/or scheduling of their working time to suit their preferences (Ramakrishnan et al. 2019), employees that lack of self-disciplines tend to procrastinate their task and eventually they will have to work overtime to complete that given task. As a result, working from home might interfere with personal life and create difficulties between work and life, which may be challenging for employees’ well-being and impact overall workplace productivity (Routley 2020).

Figure 2 and Table 2 illustrate and indicate the descriptive statistics of organization challenges of a quantity surveyor to work from home due to their roles. Majority agrees that “Organization Performance & Productivity” is the organization challenge of a quantity surveyor to work from home due to their roles, which account for the highest mean of 4.12 among the three organization challenges and standard deviation of 0.857. Based on the data, it is clear to see that the individual challenges are the factors contributing to the challenge of the “Organization Performance & Productivity”. Based on Morgan, controlling and organizing job operations outside the base office presents insurmountable obstacles (Morgan, 2004). It indicates that employers are difficult to observe, monitor and engage their employees to keep track on their progress and output when they are working from home.

Moreover, “Unclear Performance Metrics” is one of the organization challenges with the second highest mean of 4.00 and standard deviation of 0.890. Employees working from home cause difficulty for employer to evaluate their job performance, as there is no clear metrics yet due to the sudden Covid-19 outbreak. Many company managements are not familiar with remote working performance metrics as the pandemic has caused the sudden change of working culture, from working in office where employers are able to observe and value the employees’ performance, to working from home where employers are not able to supervise and monitor the employees’ performance. Various pressures exist as the firms need to evaluate their policies on evaluating their employees’ performance while they are working from home (Morgan 2004).

Among the three organization challenges of a quantity surveyor to work from home due to their roles, “Information Security Risk” has the mean of 3.88 and standard deviation of 0.932. When quantity surveyors are working from home with their personal laptop and they need to remotely access the company servers, there is an elevated risk. Employers should put protections in place to secure corporate data, such as encryption software and remote-wipe programs, in the event that mobile devices go missing. To provide secure internet access to a remote device, digital private networks encrypt data. This helps to keep documents and information secure while still making it accessible to coworkers (Eurofound and ILO 2017).

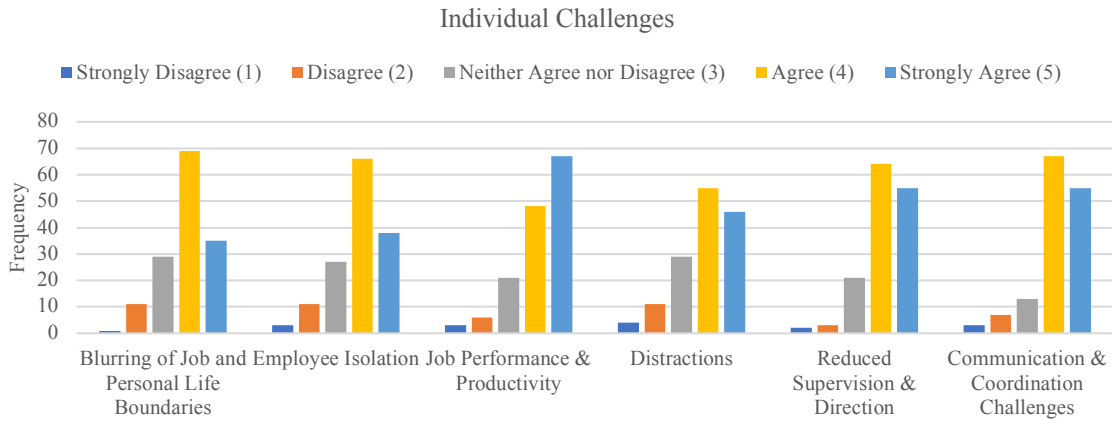


FIGURE 1. Individual Challenges

TABLE 1. Descriptive Statistics - Individual Challenges

	N	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)	Mean	Std. Deviation
Blurring of Job and Personal Life Boundaries	145	1 (0.7%)	11 (7.6%)	29 (20.0%)	69 (47.6%)	35 (24.1%)	3.87	.892
Employee Isolation	145	3 (2.1%)	11 (7.6%)	27 (18.6%)	66 (45.5%)	38 (26.2%)	3.86	.962
Job Performance & Productivity	145	3 (2.1%)	6 (4.1%)	21 (14.5%)	48 (33.1%)	67 (46.2%)	4.04	.912
Distractions	145	4 (2.8%)	11 (7.6%)	29 (20.0%)	55 (37.9%)	46 (31.7%)	3.88	1.031
Reduced Supervision & Direction	145	2 (1.4%)	3 (2.1%)	21 (14.5%)	64 (44.1%)	55 (37.9%)	4.15	.844
Communication & Coordination Challenges	145	3 (2.1%)	7 (4.8%)	13 (9.0%)	67 (46.2%)	55 (37.9%)	4.13	.915
Valid N (listwise)	145							

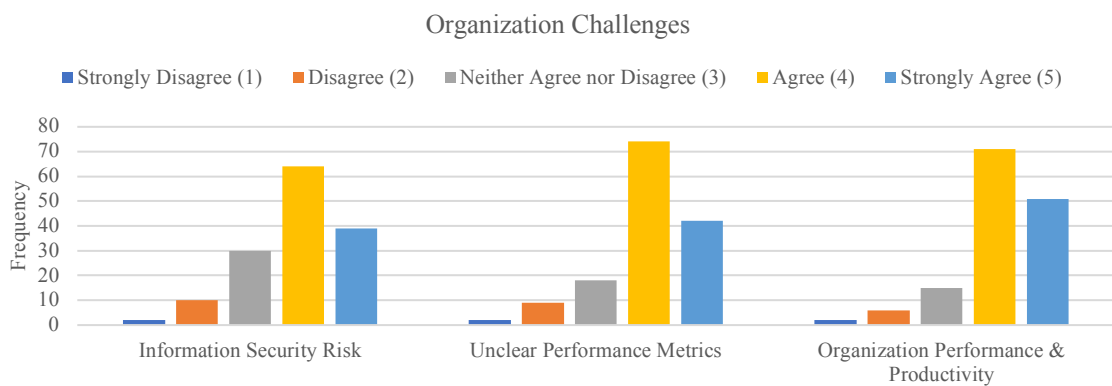


FIGURE 2. Organization Challenges

TABLE 2. Descriptive Statistics - Organization Challenges

	N	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)	Mean	Std. Deviation
Information Security Risk	145	2 (1.4%)	10 (6.9%)	30 (20.7%)	64 (44.1%)	39 (26.9%)	3.88	.932
Unclear Performance Metrics	145	2 (1.4%)	9 (6.2%)	18 (12.4%)	74 (51.0%)	42 (29.0%)	4.00	.890
Organization Performance & Productivity	145	2 (1.4%)	6 (4.1%)	15 (10.3%)	71 (49.0%)	51 (35.2%)	4.12	.857
Valid N (listwise)	145							

CONCLUSION

In short, the objective of this study has been achieved. The descriptive statistics generated by the software recorded all of the challenges of a quantity surveyor to work from home due to their roles that were proposed in the questionnaire obtain mean values above 3.8, indicating high number of agreements by the respondents to the statements. Therefore, the challenges can be acknowledged as the main challenges of a quantity surveyor to work from home due to their roles.

The greatest individual challenge of a quantity surveyor to work from home due to their roles selected by the respondents is the "Reduced Supervision & Direction", which consists of mean of 4.15. This indicates that majority acknowledges the culture of working from home possesses a huge challenge on getting supervision and direction for superior to conduct daily tasks and responsibilities. Work from home has isolated the employees and their superiors which is difficult to allow seniors supervise the work and progress firsthand and immediately, subsequently leading to the challenge of "Employee Isolation". Working from home alone for long periods may lead to employee isolation, which can be a challenge for professions who needs to involve many parties in their projects and tasks like quantity surveyors. Individuals who work at home will gradually become disconnected from their coworkers and the company community as a whole, which an office environment naturally creates. The inadequate of employees in physical propinquity can significantly impair employee development and capability upgrading. The mode may cause a challenge to the quantity surveyors to communicate and coordinate the project stages as their roles require physical meetings and submission at certain stage of the project, such as hardcopy drawing submission by the consultant for quantity surveyors to carry out measurement and taking off. This can be further relating to the challenge of "Communication & Coordination Challenges". Ultimately, these challenges may become the factors affecting directly or indirectly to the "Job Performance & Productivity" of quantity surveyor to perform their roles when they are working from home. Although many studies explained that working from home may engender greater return in employees' performance and

productivity, the respondents does not agree when it applies on quantity surveyors due to their job nature as discussed earlier. In long run, the organization performance and productivity can be affected as well.

Whereas the greatest organization challenge of a quantity surveyor to work from home due to their roles selected by the respondents is the "Organization Performance & Productivity", which has the exact same mean of 4.04 as the "Job Performance & Productivity" in individual challenges section. This indicates the responses is reliable and correct as the both challenges are interrelated. Furthermore, there is an inherent risk when quantity surveyors work from home on their personal laptop and need to remotely access the corporate servers. This has contributed to the challenge of "Information Security Risk". Accessing private company data through the internet, which is normally available freely in the workplace, may be a problem while working from home. Furthermore, exchanging data online may raise security issues, necessitating the usage of various safeguards, such as Virtual Private Networks or secure cloud services, at all times. Employers should implement safeguards to preserve company data, such as encryption software and remote-wipe tools, in the event that mobile devices are lost or stolen.

The findings also point out that work from home possesses challenges to quantity surveyor and at the same time to the organization of the quantity surveyor attached with. Due to quantity surveyor's job nature, this culture shows boon and bane to the individual and company as the culture has been just exercised abruptly in Malaysia's construction industry due to the Covid-19 pandemic. It shows significant positive impacts physically, emotionally and financially. However, it may be a double-edged sword which may affect the performance and productivity of quantity surveyors individually and ultimately, the organization.

The study of work from home should be continually researched in order for public and the employees to reap all of the benefits of working from home and hence be lucrative to the organizations. The potential areas and recommendations that can be continued for further research to reap benefits for the construction industry may include:

1. To investigate the factors influencing construction-related business organization to work from home.
2. To identify the ideal working environment for construction-related professions.
3. To determine the roles of different parties to succeed in construction projects around Klang Valley area.
4. To exercise both qualitative and quantitative methodology to collect wider perspective and comprehensive data in conducting new researches.

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DECLARATION OF COMPETING INTEREST

None

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