

## CHALLENGES OF WORKING FROM HOME AND THE MITIGATION ACTIONS TO OVERCOME THE CHALLENGES FROM THE QUANTITY SURVEYORS' PERSPECTIVE

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**Abstract:** At the height of the COVID-19 pandemic, the Malaysian government took precautionary action to minimise the spread of the coronavirus with the implementation of the Movement Control Order. This move led to employees in non-essential sectors, including the construction sector, being required to work from home. This study aims to investigate the challenges of working from home and the mitigation actions to overcome the challenges from the perspective of quantity surveyors. A questionnaire survey was used for the data collection exercise. The responses of 360 participants were recorded and analysed. The data collected were analysed using the Statistical Package for the Social Sciences (SPSS) software using the frequencies, percentage and mean analysis. Cronbach's alpha was used to measure the reliability of the questionnaire survey. The study found 11 working-from-home challenges from a quantity surveyors' perspective, with overworking as the main challenge. Furthermore, 10 mitigation actions to overcome the challenges were discovered. Creating a dedicated workspace ranked first on the list. This study could provide insights into identifying the challenges and the mitigation actions to overcome said challenges. It would be beneficial for relevant stakeholders to look into these concerns and acknowledge them accordingly. This is also in line with the Sustainable Development Goal 8, which promotes a sustainable future for all, inclusive of economic growth, full and productive employment and decent work.

Keywords: Working from home, challenges, quantity surveyor, mitigation, Sustainable Development Goals (SDGs) No. 8.

### Introduction

The COVID-19 pandemic has caused a major shift in the global working environment due to high public vulnerability. Additionally, media speculation has led this psychological condition to worsen. Most people could not bear the lockdown and needed to work from home. Heavy workloads with excessive deadlines, employment instability and work-life imbalance were the most significant challenges that employees encountered. The Malaysian government has responded to the onset of the COVID-19 outbreak by allowing workers to retain most of their activities; since the Movement Control Order (MCO) was implemented in March 2020, most employees were required to

complete their work and obligations virtually from home (as a preventive measure). These precautions were taken to limit the spread of the coronavirus and prevent the health system from being overloaded. Governments worldwide also took similar measures and lockdowns had a significant impact on organisations. Most public offices and private industries continued to operate virtually from home to maintain operational quality and eliminate failure as much as feasible. Nevertheless, this crisis has a neglected impact on human capital. Employees' well-being and involvement should indeed be prioritised throughout the crisis to secure their personal and academic well-being, as higher frequencies of contact with jobs and family

responsibilities will contribute to workers' mental breakdown as stated by Smith (2011). Jobs are no longer limited to eight hours in the workplace, with a warped schedule, which can lead to tensions, whereby an employee's thoughts in a typical work environment may swiftly transfer from work to home matters once they physically leave the office. In certain circumstances, this effect involuntarily arises due to a change in the individual's physical lifestyle and requires less individual effort, aside from psychological and emotional impediments, furthermore, employees who work from home encounter a variety of other challenges. However, working from home with the aid of technology is an intelligent answer to the modern working environment due to the distortion of borders between business and family hours for most workers. Working from home was once regarded as an essential management technique for increasing workforce flexibility as well as optimising work-life balance, organisational commitment and overall job satisfaction (Felstead & Henseke, 2017; Sahni, 2020). Therefore, it tends to cause a disequilibrium among both working and personal lives, resulting in indeterminate working hours and blurred boundary lines. Many industries have been affected by the MCO and the construction industry is no exception. Employees needed to undergo a transitional period, whereby the regular working routine changed to working from home. Working remotely is difficult for some employees since they need to figure out when and where to work, and how to build divisions between the personal and professional lives since there are several distractions.

Based on the findings by Yusof (2020), employees' productivity in Malaysia recorded a 77% decline. Several factors were discovered in the study, which included Internet connection speed, access to company resources, restricted access to information, delays in responsiveness and family involvement or disruptions. Another issue associated with working from home is emotional feelings. Elengoe (2020) highlighted that the MCO had impacted working parents with small children, whereby additional responsibilities might arise

due to the closures of schools and daycare centres. Working parents might be forced to engage in home-schooling, supervision and care of school-aged children, or even more than one former friend might need to share the same place for online schooling or workplace. Family commitments, the necessity of sharing working spaces or even interpersonal abuses might combine with an employee's professional responsibilities which would alter working hours and hence, reducing productivity growth. Time management is also another issue associated with working from home. As indicated by Frank *et al.* (2017), working from home comes with unique time management issues under normal circumstances. According to Buffer *et al.* (2019), 18% of remote employees found it difficult to unplug. The elimination of commuting time to and from work and the advantages of working from home might incur more working hours for several employees. Therefore, this study is focused on investigating the challenges associated with working from home and the mitigation actions to overcome these challenges from the perspective of quantity surveyors (QS).

This research focused on QS in Kuala Lumpur and Selangor within an appropriate time frame. A quantitative method was adopted for the data collection through the distribution of a set of questionnaires to the QS. The Klang Valley was chosen as the data collection exercise because Kuala Lumpur and Selangor are both considered congested cities compared with other areas in peninsular Malaysia, as reported by Shah *et al.* (2020). One of the limitations of the study is that data collection exercise was conducted online due to MCO restrictions. It is believed that this study will provide valuable insights into the challenges of implementing the work from home policy from the QS perspective. Despite the fact that there has been some research in this area (Rachmawati *et al.*, 2021; Saif *et al.*, 2021; Afrianty *et al.*, 2022), none has been undertaken on a specific construction player such as the QS. When the federal government announced the MCO to curb the spread of COVID-19, several job functions of the QS were affected such as site visits and site valuation. Therefore,

this study could be considered as a significant contribution in revealing the challenges and mitigation factors for the QS to brave the impacts of working-from-home environment during the COVID-19 pandemic.

## Literature Review

### *The COVID-19 Pandemic*

In December 2019, a serious contagious disease was discovered in Wuhan, China known as COVID-19. The coronavirus responsible for the disease is a zoonotic virus, which is a virus that can spread from animals to humans. It was the first transitional virus to infect a human as highlighted by the World Health Organisation (2018). COVID-19 patients exhibit symptoms similar to influenza and tuberculosis, as well as fever and respiratory difficulties. Specifically, the virus can cause pneumonia, acute respiratory syndrome, renal failure and most critical of all, death. COVID-19 can be contracted by breathing in the air of an infected person expelled during coughing and sneezing. On average, patients are asymptomatic for five days but they may show symptoms as early as two days and as late as 14 days.

The virus was confirmed to have entered Malaysia through Chinese travellers in late January 2020, as reported by Reuters (2020). According to Bernama and the New Straits Times (2020), Yang Di-Pertuan Agong of Malaysia expressed great concern about the intensifying outbreak as the number of COVID-19 cases grew in early March. Subsequently, the Malaysian prime minister issued a nationwide MCO. The Malaysian government took a risky and unprecedented step to combat the outbreak. The order was extended four times every two weeks for two months. Five restrictions were implemented during the MCO:

(1) Public mass gathering was not allowed including religious, sporting, social or cultural events, except for supermarkets, public markets, pharmacies and convenience stores that offer daily necessities. All places of worship and businesses should be closed.

- (2) Malaysians who return from abroad are subjected to a medical examination and a 14-day self-quarantine.
- (3) Tourists and foreign visitors were not permitted to cross national borders.
- (4) All educational institutions including kindergartens, public and private colleges, boarding schools, international schools, *tahfiz* centres, and public and private higher education institutions should be closed.
- (5) All government and private buildings except for those deemed as essential services were closed.

As reported by Yusof (2020), the epidemic had impacted several areas, including the construction sector. All projects were on standstill and there were no significant on-site activities. According to Rozaidee (2020), all activities had to change from being face-to-face to being conducted online. As this paper was written (16<sup>th</sup> August 2021), 20,546 new COVID-19 new cases were reported, which brought the number of infections in Malaysia to 1,404,899. The number of cases is disturbing and alarming to all.

### *Construction Industry and the Players*

The construction industry is one of the contributors to Malaysia's economic growth, which plays an important role in the development of the economy (Mohd Fateh & Yee, 2021). Although the building business is not a big component of economic growth, it is vital for producing wealth, improving living standards and providing numerous employment opportunities for the Malaysian community. Mustajab *et al.* (2020) stated that 8.7% of the total employment in Malaysia is in the construction sector. Based on the Construction Industry Development Board (2017), productivity is one of the thrusts in strengthening the construction industry in Malaysia. The construction industry comprises several types of individuals and organisations from various backgrounds such as architects, engineers and QS. Furthermore, employees

are subjected to extreme weather and climatic conditions as well as noise and dust, putting them in a physically challenging work environment (Vyas & Butakhieo, 2021). The construction industry is inextricably linked to a country's economy with many employment opportunities. Managing the human resources involved in this sector is an important part of the business. The management of the business is ultimately responsible for the mental and psychological well-being of its employees. Sahni (2020) stated that the failure of an organisation to embrace workers in their community would eventually lead to increased illness and loss in the organisation's efficiency.

The various roles and responsibilities of each player in a traditional building project are central to the comprehension of a site's operations. It is vital to clarify the role of specialists who work in a conventional construction area. The various role-players involved in a traditional construction site and the relationships and roles between these role-players in a relatively simple construction project are intended to be discussed. The classic construction process could be simple, not only physically but also because the experts should work together to achieve the desired result. Mostly, the "required result" transfers the agreed-upon product within the agreed-upon budget and timeline. The three key considerations are typically scope, cost and time. Determining that these criteria are met necessitates the ongoing supervision of on-site activities by a professional person-in-charge. The traditional construction team includes a variety of specialists from various disciplines in the engineering field. They are often trained professionals with extensive experience in a variety of expertise fields. The specialists who require additional care are architects, engineers, QS and project managers. Other professionals include project managers and general contractors. However, this study focuses on QS only.

QS are construction players who advise on all elements of the construction costs, financial management and contract management.

According to Spellacy *et al.* (2021), QS plays an important role in the construction industry during the pre-tender and post-tender stages such as feasibility studies, cost plans, preparing the bill of quantities, tendering and evaluation of tenders. The profession of QS was established in the United Kingdom at the beginning of the 19<sup>th</sup> century. Kiran (2009) reported that the first recorded usage of the term "quantity surveyor" was in 1859; other terms such as "measuring device", "custom surveyor" or "surveyor" were used before that. In the early days, QS served as the expert trader, assessing the completed work and sending the final accounting to the structure's owner regularly. The duty of determining the quantity of all materials and equipment needed for the work performed and preparing the bill of quantities is the only method to arrive at a correct estimation of the cost or tender (Morena & Amoah, 2021). Whenever contractors were required to provide the bill of quantities for each operation, they quickly realised that it would be more cost-effective for them to hire a single surveyor to perform the task. Additionally, the QS might act as a financial analyst to the client, who participates in various stages of the project as highlighted by Morena and Amoah (2021). The designer would send the finalised sketches to the QS, who would then "measure" the designs and prepare the bills for the specific amount (Olanrewaju & Anahve, 2015). The estimated costs of goods and personnel required to complete the project will be chosen as the final specifications. Furthermore, everything from the volume of cement, the tonnes of steel, the total number of bricks, to the square measures of paint would be specified. Bills of quantities are typically one of the major papers in a construction contract. Professional QS provide their clients with a wide variety of services but they take note of gaining experience or focusing their services on a specific field. Overall, the QS oversee comprehensive quantifying, budgeting and regulating of costs of construction work in a building project. This could be a housing development, a shopping mall, a green energy facility or a new civil engineering system such as a crossrail or an airport runway. Lindsay *et*

*al.* (2015) and Agrawal *et al.* (2017) highlighted that the specific responsibilities of a QS job post would vary depending on the type of employer, either a consultant, contractor or client.

In Malaysia, there is no distinction between what is practised internationally. QS work on a wide range of projects, including homes, commercial property developments, hospitals, mosques, petrochemical facilities, motorways, dams and airports. There are more than 1,000 qualified QS in Malaysia and a few hundred more in training (Quantity Surveying Division, 2022).

### ***Working from Home and the Challenges***

Historically, Sayer (2005) coined the term “working from home” as a working day spent in the home area. Saludin *et al.* (2013) mentioned that various keywords were associated with working from home such as “working at home”, “homeworking” and “teleworking”. All the keywords boiled down to working from home by using the internet and with mobility, regardless of the physical place of a particular job. These terms are also used interchangeably to refer to new and developing employment models that exist outside of the employer’s facilities or workspace. When the MCO was announced by the Malaysian government, all businesses were required to close, except for those deemed as essential services. The word “working from home” also applies to home-based, temporary or alternative work arrangements. During the MCO, all workers from different industries, including the construction industry, needed to work from home to curb the spread of COVID-19. Initially, employers, employees and consumers might be physically and mentally unprepared in implementing the work-from-home arrangements. According to the International Labour Office (2018), there were some challenges associated with the working-from-home implementation faced by employees, such as communication, information technology equipment, data protection and security, and workspace setup. Delahoussaye (2020) stated that some of the challenges of the working-from-home arrangement during the COVID-19

pandemic include disruptions and workers being unmotivated, having a hard time setting boundaries and feeling isolated.

There are several distractions or disruptions that arise when working at home. Family members, household chores, pets, handphones, television, easy access to social media and ambient noise are some of the factors that lead to employees losing focus when working from home. One of the impacts of distractions is employee’s lowered productivity, which is caused by loss of time and therefore, affects the work quality due to rushing to complete pending assignments. Furthermore, background noise such as people talking, phones ringing, doors opening or closing and annoyances such as coughing, loud snacking or music playing are also distractions to employees working from home. The noise level is unavoidable. However, if it becomes too distracting, they might also invest in noise-cancelling headphones or relocate to a quieter area when they need to devote their full time and attention. A study by Zajeckowski (2020) that looked into employees’ experiences found that 54% of respondents face more distractions at home. However, Mlitz (2021) recorded that 61.6% of respondents said that social media provided the most distraction among employees while working from home during the pandemic.

The next challenge employees face is having difficulty to staying motivated or focused while working from home. An improper workspace such as on the bed will entice workers to take a nap. Setting up a workplace is a big part of the traditional working environment. This environment will be detached from the home and therefore, employees need to focus on that location. Working remotely presents a unique challenge. If workers do not have a suitable environment for remote working, the mind will most probably struggle to be in working mode. Vaidya (2020) reported that when our simple recollections or subcellular localisations get bombarded with information, we tend to lose concentration and become distracted. Staying motivated entails more than just simply avoiding distractions. Distractions are

temporary. Absorption loss prevents employees from concentrating on what they would like to focus on and could discourage them from moving forward with their responsibilities. The difficulty of setting boundaries is another challenge faced by employees working from home. When they have a physical place of employment, workers have a set time to clock in and leave every day. However, when working from home, it is challenging to set boundaries because employees have constant access to emails and may check them before going to bed and opt to respond to clients or superiors at all hours of the day. Remote workers who lack precise team requirements on how and when to work, combined with excessive screen time, could easily blur the lines between work and life, resulting in disparagement, resentment and exhaustion. Eddleston and Mulki (2017) discovered that working from home was related to remote employees' difficulty to disconnect from work. Conversely, Komari (2020) remarked that career mothers might struggle to strike a balance between work and family especially when both require greater time and consideration. Working women are perplexed as to how to balance work and home duties, resulting in a double bind as agreed by Delina and Raya (2016).

The feeling that one needs to work more can cause overworking, which can put employees' health and well-being at risk, and can lead to burnout. People frequently believe that telecommuting entails sitting at home eating snacks and watching television while not doing much work. However, instead of just underworking, one of the most challenging aspects of working remotely is not overworking. Whether it is working a few additional hours to finish everything and checking their notifications before going to bed or accidentally spending 30 minutes attempting to write a reaction that could be done in the morning, this technically shows that employees spend a large part of their day working. They might be unable to properly switch off and unwind. Many employees found it hard to unplug from work, which could lead to overworking. Some employees found it difficult

to take a break just to have lunch because they do not know how to switch off. A major contributor to the employee's inability to switch off is that work and relaxation are occurring in the same environment. Therefore, employees who work from home felt overworked because they forgot how to take a break. Sardeshmukh *et al.* (2012) noted that the removal of the physical barrier between home and work might lead to employees working longer hours per week, particularly during the time usually spent on commuting to work.

Ipsos (2020) recorded that 57% of Malaysian employees feel lonely or isolated when working from home. This was echoed by Toniolo-Barrios and Pitt (2021) who stated that working from home could cause people to feel isolated or lonely, leading to depression and other mental health issues. The new norm environment forces employees to have fewer interactions with other people, especially if they are single. Usually, when employees have to perform their duties physically, they can interact and meet their colleagues. Social isolation can affect anyone, regardless of age, health or background. O'Connor and Peroni (2020) added that one-third of people with mental health issues experienced a deterioration of their mental wellbeing during the COVID-19 pandemic. This emphasises the importance of self-care and finding ways to cope with angst and loneliness. It is important to remember that employees do not have to be alone to feel lonely. However, when employees can interact, unwanted and prolonged feelings of isolation can cause others to withdraw. It is necessary to find ways to connect with others who regularly work remotely. Currently, several people are still working from home while others are still required to isolate themselves due to underlying health conditions with children being unable to return to school until further notice. All members of the household suffer from a lack of socialisation and feelings of isolation. Social isolation should not be harmful in the short term. Conversely, long-term social isolation could increase the likelihood of conscious psychological health problems such as depression, anxiety, pressure and even

Alzheimer's disease. There is also a physical health consequence, as there is an elevated risk of heart attacks. As there is a possibility that remote working is going to continue for the foreseeable future and possibly beyond the pandemic, it is in the workers' collective best interests to address loneliness in an open and supportive manner.

Internet connectivity is very critical when working from home. Any completion of a task, numerous social meetings, the acceptance of an email and other duties all require a smooth Internet connection. According to Mohd Daud *et al.* (2021), 61% of respondents experienced network challenges when working from home. Moreover, Vyas and Butakhieo (2021) noted that 35% of employees had poor or no access to the Internet at home which prevented them from telecommuting effectively. Employers need to ensure that their team has machines that can provide great audio quality with the increasing emphasis on virtual meetings and video calls. Poor sound quality can be an issue, which is related to poor tech infrastructure or a bad connection. Navon *et al.* (2021) mentioned that long-range work was the greatest challenge to the work-from-home arrangement because of the lack of management's knowledge and the quality of time information. This makes communication between a team of people in the zone to progressively encounter more difficult communication issues that can harm work progress. Moreover, the difficulty to speak without tone and body language is very important to understand while working from home. Furthermore, employees working from home will find it difficult to cooperate depending on their respective work and time, whereby they start and end at different times. The exact schedule and certain time restrictions, in cases where all employees should be online are very challenging to overcome. It is quite hard for employees who work from home to find a suitable time for everybody when scheduling meetings and if there is time available, there could be employees who are unable to attend as highlighted by Yusof (2020). More than half of the employees realised that fostering

collaboration with co-workers during the work-from-home arrangement can be challenging since they have issues with separating their working and home lives, as reported in a previous study by Navon *et al.* (2021).

### ***The Impact of Working from Home***

Quantity surveying is a synthesis of several other fields such as finance, law, accounting, management, calculation, telecommunications and building technology, within a single context of the organisation. When the number of QS companies in the country grows, it becomes clearer which company plays an important role in the Malaysian construction industry. This is because it accounts for a growing proportion of total manufacturing production and employment. The dynamic market has a direct impact on QS companies in terms of the current era and bidding. This includes the document preparation such as cost estimation, cost schedule, quantity bill, tender record, interim valuation certificate and final payment as highlighted by Saludin *et al.* (2013). Saludin *et al.* (2013) found that that 50% of the respondents (QS) had been performing some portion of their duties from home due to deadlines. Worldwide, the pandemic has had a great impact on all professions which includes QS in the form of work-from-home arrangements. Attitude influences the work-from-home experience. Employees who telecommute should have a great deal of self and time management skills, as well as clear and concise communication. Yaakob *et al.* (2021) stated that QS required a high level of coordination between team members.

Work-life balance is regarded as the measurement property of improved health and well-being, and lower occupational stress or burnout as mentioned by Rashid *et al.* (2011). Nevertheless, having more personal responsibilities such as domestic duties, caring for sick parents or other family members is thought to be a good indicator. Many employees need to multitask while doing office work and household chores, whereby they often lose focus on work due to distractions. Based on the findings

by Jacob (2020), multitasking led to a decrease in motivation and employees’ performance. Gürkan *et al.* (2010) argued that communication tools such as laptops and notebooks sometimes disrupted employees’ work productivity such as when they receive information.

Small groups of workers operating in the different phases of a construction project, who are not required to undertake every stage of the project and a minority of QS employees in charge of just about every element of a construction process can successfully telecommute. This further emphasised that as QS handle a project, they need to access private and confidential documents. Most of the company’s policies stated that all important documents should be retained within the office. QS had difficulty in accessing all the documents needed during the MCO.

Empowerment is regarded as an upper management mindset change that is critical in determining the changes. Working remotely is a new working environment that can provide QS companies with a competitive advantage and it should be implemented gradually. Workers are encouraged to work remotely as a

flexible work method and employment contract loyalty gives teleworking employees a sense of accomplishment. The generation shift and equality in retaining and recruiting staff can help in terms of turnover rates such as for young people (Generation Z), women and retirees, according to Munusamy (2011).

Arguably, working from home has its positive and negative. Some employees prefer to work in normal office settings while some prefer to work from home. Aljawamis (2007), Arthur (2013), Boersma (2018), Hawash *et al.* (2020), Mustajab *et al.* (2020) and Travers *et al.* (2021) listed the advantages and disadvantages of working from home as shown in Table 1.

***Mitigation Actions to Overcome the Challenges of Working from Home***

The Malaysian government announced the MCO in March 2020 which forced many employers and employees to work from home. Employees are adequately versatile in terms of conducting their duties when working at home. Borsellino (2021) listed the mitigation actions that would help overcome the challenges of working from home.

Table 1: Advantages and disadvantages of working from home

Advantages of Working from Home	Disadvantages of Working from Home
<ul style="list-style-type: none"> <li>• Reduce commuting time, provide flexibility as well as reduce travel expenses and carbon emissions. No more commuting during peak hours which can lead workers to begin their day with frustration.</li> <li>• More family time for workers, leads to better work-life balance and enhanced productivity.</li> <li>• Flexible working environment with an informal dress code.</li> <li>• Reduce expenses on pricey food for breakfast and lunch.</li> <li>• Businesses can hire talent from the greater geographical area while saving the amount of money by reducing office space use.</li> </ul>	<ul style="list-style-type: none"> <li>• The mixing of employees’ work and private life.</li> <li>• Distractions by children who demand attention.</li> <li>• Difficult to stay focused and concentrate on work due to continuous disturbances (noise, Internet connection or house chores).</li> <li>• Lack of technical assistance if employees experience any technical glitch at home.</li> <li>• Lack of human touch and interaction in discussions, presentations and big meetings. Gestures and body language are important elements in reaching a decision as well.</li> </ul>



Changing to appropriate clothing signals that it is time to wake up, get ready and accomplish things. It will help employees to feel normal and confident which aids in drawing a line between being at work and being at home. It is important at a time like this when the breakdown of everyday routine might give employees a sense of being cut off from normal life and the real world.

Establishing a dedicated workstation that resembles an office setting will help employees to get in the “zone of working”. On the other hand, leaving the workstation will assist in disconnecting from work at the end of the day. The key here is to have a proper separation between work and day-to-day chores. Even those working in the office need a short break during the day. By removing oneself from the workplace environment regularly for 10 or 15 minutes, employees will feel freshened and energised and can be productive when they return to the working zone, rather than feeling exhausted and unable to focus. This was echoed by Umishio *et al.* (2022), who stated that given that a home is classically a place for rest, standard light fixtures and the Internet infrastructure may be unsuitable for work. Furthermore, if the overall floor area of the house is limited, it will be difficult to establish a distinct working zone at home. Working zone setups can include a computer on top of a kitchen table, a laptop in a recliner or work done while sitting in a bed or on the floor. None of these working zones is designed to support a full day of work, especially from an ergonomic standpoint (Gerding *et al.*, 2021). Realising and acknowledging the complexities of the working zone separation in the house is a critical component in achieving work-life balance. It will help employees to avoid burnout and sustain their mental well-being during the pandemic (Xiao *et al.*, 2021).

While everyone is working from home, employees may lose some of the informal social interactions compared with working in the office. It may lead the employees to the feeling of loneliness and disrupt the work monotony. People seem to forget that they still need to be around others for casual conversations and

interactions. Teams can schedule a video call session to allow everybody some space for small talk or catching up on matters outside their work duties. This may also apply to family members and relatives. Shah *et al.* (2020) recommended having a lunch session resembling the lunch break in the office, where everybody will talk and take a break from work while having lunch. Furthermore, employees can start making time to socialise virtually or organise a virtual tea-break or a Friday online get-together. Employees and the teams are probably experiencing the same feelings; therefore, people need to inquire about how others are doing.

Some other methods that employees can take is to strictly delineate working hours. This entails responsibility and knowing when enough is enough. Employees might have days when a large amount of work is about to complete where overtime is needed. However, doing this daily can be harmful because working overtime can cause physical and mental exhaustion. Moreover, this might have an impact on other people in the house as well. Furthermore, employees can create a to-do list, even though it is difficult to stop thinking about work after clocking out because the brain holds on to thoughts of unfinished chores until it is accomplished (Gardner *et al.*, 2021).

Lopez *et al.* (2019) recommend employees keep track on how they spend every hour of the day. Self-tracking allows the employees to understand the time that they are more or less productive. The findings suggested that merely having a strategy such as a to-do list will liberate the mind of intrusive thoughts on incomplete work. Consider long-term goals such as completing a large project, as well as short-term goals such as tasks that lead to the big goal. Check each plan off the list as it is completed. It also helps to begin each day knowing exactly what employees need to work on. That way, employees will not waste time attempting to determine priorities, which will result in even more undone tasks. Employees can also make a to-do list for the next day such as when to start working on a weekday until the weekend. This include having a fast Internet connection, setting

a quiet space, setting a clear communication and establishing boundaries when working. This approach also allows family members to be aware of the work schedule to prevent intrusion into the workspace. Kaletta (2012) stated that while employment locations have changed, it is no different than any other career needing seclusion and attentiveness. The schedule may deter family members from dropping by the workplace. Interruptions and drop-ins can cause loss of concentration and procrastination, leading to workers falling behind on a deadline.

The critical factor to thrive in the work-from-home arrangement is that employees need to have robust Internet services. This will help employees to deliver their completed tasks, interact with team members and communicate with clients. Chakraborty *et al.* (2018) recommended installing the router at the correct height, which can have a large impact on the Wi-Fi Internet signal. A reliable Internet connection is essential for working from home. This will help employees to perform their jobs to the best of their ability. Furthermore, employees also need to find a suitable location to receive a strong Wi-Fi connection. These might necessitate some trial and error such as shifting the workspace to a new location or rearranging the room.

## Methodology

This study started with an extensive literature review to grasp the issues. Next, a questionnaire survey was used for the data collection exercise. The overall population of QS consisted of 1,645 registered provisional QS in the Klang Valley, according to the Board of Quantity Surveyors Malaysia (2021). Convenience sampling is the simplest method of sampling because participants will respond to surveys based on availability and willingness to take part freely (Stratton, 2021). Therefore, the questionnaire survey was distributed to all registered provisional QS using Google Form at <https://forms.gle/9HHnF8u6Zbm6512CA> since the data collection exercise was carried out during the MCO in Malaysia. A total of 360 responses were received which translated into a response rate of 22%. The response rate

of a questionnaire is the percentage of persons who completed the questionnaire relative to the number of people who viewed or attempted it. It is an important indicator for analysing whether a survey is effective in engaging its intended audience. Other researchers also viewed that the normative response rate in the construction industry was around 20% to 30% (Takim & Adnan, 2008; Mohd Fateh & Nijar, 2019). As the survey was completed by various player groups (gender, marital status, type of employer and working experience) in the construction industry, the researchers became increasingly confident that the responses were representative, recognisable and credible. The questionnaire was divided into three sections. The summaries of the sections are as follows:

- **Section A.** The landing page elaborated on the research background and the objective of the questionnaire exercise. By explaining this to respondents, will have better clarity and be in the proper mindset to answer the survey. The researchers also ensured that all information was kept confidential and would be used only for academic and publication purposes. The researchers' contact details were provided in this section. Therefore, respondents are free to contact the researchers if they have any queries or need clarification. This was crucial to ensure that respondents feel safe and comfortable in revealing and sharing information for the survey. This section also recorded the respondent's demographic profile, including the type of employers, years of experience in the construction industry and their work-from-home status during the pandemic.
- **Section B.** This section was divided into two, Sections B1 and B2. In Section B1, the researchers recorded the challenges of working from home. Meanwhile, Section B2 was for the challenges of working from home related to the QS profession. The questions were formulated based on the literature review (Rachmawati *et al.*, 2021; Afrianty *et al.*, 2022). This was critical to ensure that respondents have excellent and sufficient knowledge and experience in answering the

questionnaire. All questions were asked on a five-point Likert scale, ranging from “strongly agree” to “disagree strongly”.

- **Section C.** This section was also divided into two, Sections C1 and C2. In Section C1, the researchers asked respondents about the general action to mitigate the challenges. The researchers listed down suggestions for the respondents on how to deal with the challenges faced while working from home from literature review (Aisyah Tumin, 2020; Orsini & Rodrigues, 2020; Suprapti *et al.*, 2020). Meanwhile, Section C2 elaborated on the mitigation actions to overcome the challenges that were suitable to be implemented. The researchers provided the options for respondents to agree or disagree regarding the challenges. The researchers recorded all the responses from the participants on the problems faced and for any suggestions on how to address the challenges. At the end of the section, the researchers also provided an open-ended question for respondents to voice out their suggestions, opinions or advice on the challenges or ways to address the challenges associated with working from home during the pandemic.

All the data collected were analysed using the Statistical Package for the Social Sciences (SPSS) software version 26. The frequency, percentages and mean analyses were conducted. The overall purpose of the descriptive analysis was to organise and summarise a set of scores to generalise the findings as per the research objectives. This was in line with Gravetter and Wallnau (2013) and Sekaran and Bougie (2016) who stated that descriptive analysis was able to arrange the data collected into a more comprehensible form so that every instruction in the data could be seen and easily communicated to others, and easily understood. It is the most common method used by researchers to simplify the organisation and delivery of data collected. The reliability test (Cronbach’s alpha) was done to check the survey’s internal consistency. Cronbach’s alpha was used to evaluate each instrument’s component in the questionnaire.

The Cronbach’s alpha obtained was 0.801 which indicated that the items were connected and consistent with the study’s sample, and that the interval consistency level was good as stated by Pallant (2011). The closer Cronbach’s alpha is to 1, the higher the internal consistency reliability, according to DeVellis (2011) and Sekaran and Bougie (2016).

## Results and Discussion

### *Respondent’s Demographic Profile*

Demographic profiles contain personal and behavioural information about the respondents. In this research, the personal information collected from the respondents consisted of the type of employer and years of working as well as involvement in the construction industry. In terms of the respondents’ years of experiences, most of them had 6 to 10 years of experiences (44%) and 11 to 15 years of experience (24.9%). This was followed by respondents who had 1 to 5 years of experience (24.3%) and 15 years of experience (6.9%). While in the context of the type of employers, most of the respondents were working with contractors (42.9%). This is followed by those who work with consultant firms (40%), 8.9% were working with the developer, 8% were from the client and 0.3% were independent checkers. From these findings, it showed that the majority of the respondents had vast experiences in the construction industry and the type of employer spread across the sectors, thus, the responses and opinions from the respondents were valid and reliable for the research. Table 2 illustrates the respondent’s years of experiences in the construction industry and Table 3 shows the type of employers of the respondents.

### *Challenges of Working from Home*

This section illustrates seven challenges of working from home in the QS profession. Participants’ responses ranged from “strongly agree” to “disagree strongly”. Table 4 shows the mean responses and the percentage of working from home for the QS profession. The results

Table 2: Respondents' years of experiences in the construction industry

Years of Experiences	Frequency	Percentage (%)
1 to 5 years	85	24.3
6 to 10 years	154	44.0
11 to 15 years	87	24.9
More than 15 years	24	6.9
<b>Total</b>	<b>350</b>	<b>100</b>

Table 3: Type of employers for the respondents

Type of Employers	Frequency	Percentage (%)
Client	28	8.0
Developer	31	8.9
Consultant	140	40.0
Contractor	150	42.9
Independent checker	1	0.3
<b>Total</b>	<b>350</b>	<b>100</b>

showed that 90.9% of respondents ( $M=4.66$ ) indicated that they felt overworked. This is in agreement with Rachmawati *et al.* (2021) who reported that the work-from-home arrangements lengthen work hours and overburden employees with various types of work. Gerding *et al.* (2021) also added that the results of home office work include an increase in stress and tiredness. This rise in negative reactions may indicate additional challenges that employees face in work-from-home arrangements, such as less work-life balance and lower personal/family success than employees in a conventional office setting. Several of the QS were working more shifts than usual, which lead to them being overworked. Meanwhile, 89.4% of the respondents ( $M=4.59$ ) felt it was hard to focus on work. Some employees forget key priorities and areas of focus were lost. Having an improper workspace such as on the bed, would tempt them to take a nap. The distraction on the first point also contributed to employees losing their focus. Rachmawati *et al.* (2021) highlighted that due to the poor internet connection and limited facilities at home, some employees can lose focus easily. Employees should build cues to aid the transition into and out of "work mode".

The findings were supported by Sardeshmukh *et al.* (2012) who highlighted that removing the physical border between home and work could lead to employees working longer each week especially if they do not have to drive to work. Gerding *et al.* (2021) revealed that employees relatively felt uncomfortable, which is mainly due to the ergonomics of the home facilities (laptops, sitting conditions and lighting). Furthermore, 87.4% responded ( $M=4.56$ ) that one of the challenges of working from home was setting boundaries. When working from home, it was hard employees to set boundaries since they had access to emails and might check them before going to bed and opting to respond to clients or superiors at all hours of the day. The physical boundary had disappeared alongside the digital boundary which made switching off even more difficult. The results also showed that 87.1% ( $M=4.54$ ) believed that Internet speed or connectivity issues was another challenge employee had to face while working from home. Numerous consumers use broadband plans with far lower efficiency than those in the workplace. As a result, when several people connect to the same Wi-Fi network connection to stream movies or conduct video conferences, overcrowding

Table 4: Frequency and percentage analysis of the challenges of working from home for the QS profession

Challenges	Mean Score	Positive Responses (Strongly Agree and Agree)		Neutral		Negative Responses (Strongly Disagree and Disagree)	
		Freq.	%	Freq.	%	Freq.	%
Feel overworked	4.66	318	90.9	7	2	25	7.1
Hard to focus on work	4.59	313	89.4	5	1.4	32	9.2
Difficult in setting boundaries	4.56	306	87.4	11	3.1	33	9.4
Internet connectivity	4.54	305	87.1	8	2.3	37	10.6
Communication issues	4.49	300	85.7	6	1.7	44	12.6
Documents are private and confidential, must be retained within the company grounds	4.39	296	84.5	6	1.7	48	13.7
Complications of incorporating data from the firm's computer software into own computer	4.21	282	80.5	4	1.1	64	18.2
A rigid organisational system prevents the management from changing to a newer concept	4.02	264	75.4	8	2.3	78	22.3
Face distraction or disruption (kid's distraction, easy access to social media, household chores, ambient noise)	3.96	259	74	6	1.7	85	24.3
QS requiring a high level of coordination between team members	3.92	252	72	5	1.4	93	26.6
Feel lonely/isolated due to a lack of human interaction	2.81	148	42.3	10	2.9	192	54.9

and slowdowns could occur. Furthermore, 85.7% of the respondents (M=4.49) agreed that they had communication issues while working from home. Many employees reported that the decrease in the information provided by the management caused half of the assigned tasks to be delayed. Subsequently, 84.5% of respondents (M=4.54) agreed that private and confidential documents should be retained within the company which was the most challenging thing about working from home for the QS

profession. Private and confidential documents include tender and contract documents, drawings, quotations and any relevant reports concerning projects. Complications of incorporating data from the company's computer software into their own computers was the second challenge that was agreed upon by 80.5% of the respondents (M=4.21). The third challenge of working from home related to the QS profession was that a rigid organisational system prevented the management from changing to a newer

concept which was agreed upon by 75.4% of the respondents (M=4.02). A total of 74% of the respondents (M=3.96) agreed that they faced distractions or disruptions while working from home and 72% of the respondents (M=3.92) stated that QS require a high level of coordination between team members. Moreover, 42.3% of the respondents (M=2.81) felt lonely or isolated due to the lack of human interactions. The new norm environment led to employees having fewer interactions with other people, especially those who are single. Usually, when employees have to perform physical tasks, they can interact and meet their colleagues. These challenges would also impact their mental health. Table 4 shows the frequency and percentage analyses of the general challenges of working from home for the QS profession.

#### ***Mitigation Actions to Overcome the Challenges of Working from Home***

Table 5 displays the mean score, frequency and percentage of mitigation actions for the challenges of working from home for the QS profession. Up to 92% of the respondents (M=4.68) agreed that the way to mitigate the challenges is to create a dedicated workspace. Having a dedicated workspace at home has several benefits for employees. The space dedicated for work would allow employees to focus more on their tasks, and mentally, it would bring employees into working mode and environment like as at the workplace, reduce distractions and help create a work-life balance while working from home. This is in agreement with Borsellino (2021) who stated that creating a separate workstation that resembled an office environment was vital. Employees would be able to go into the “zone of working” by approaching their workstations. Leaving the workstation, on the other hand will help to disconnect from work at the end of the day. It will help employees to avoid burnout and maintain mental health well-being during the pandemic. Gerding *et al.* (2021) also added that the workstation needs to resemble the office setting, which provides a proper working space while observing the ergonomic elements. Secondly, 90.5% of the

respondents (M=4.61) agreed to set goals and prepare a to-do list which was the second action to mitigate the challenges of working from home. When working from home, employees do not have a boss breathing down on their necks. It can be challenging to keep track of what they must do throughout their workday. It is easy to lose sight of priorities, tasks and deadlines. Employees should set goals and time limits for each task and after completing the task, it should be deleted from the list. Employees should abide by the list that they make. Therefore, 90% of the respondents (M=4.60) voted to identify the working hours and abide by it which was the third action to mitigate the challenges of working from home. This involves setting an exact time each day so that employees are able to be consistent in many ways. The repetition would eventually take root in employees’ life and ensure its position. This would be half the effort to encourage their self-work and create a habit that employees would automatically instil. Gerding *et al.* (2021) reported that a lack of break or pauses will increase stress in workers greatly. Employees need to be creative on how to incorporate any physical exercise or movement into their working routine at home. It is vital to stretch every 30 minutes to stimulate muscle activation, decrease static postures and maybe reduce stress. Working on the bed for an extended period of time causes fatigue. Furthermore, 90% of the respondents (M=4.60) agreed that QS companies need to reduce the barrier of bringing private and confidential documents by controlling and providing access to only persons involved in the project. Some companies are very strict about bringing home any relevant documents, even if the person is involved directly in the project. During the pandemic, the MCO made it difficult for employees to commute to the office daily. The companies need to consider this concern and introduce a flexible policy to help employees to deliver their tasks. Subsequently, 88.9% of the respondents (M=4.55) stated that physically carrying out the same routine such as going to the office, could reduce the working from home challenge. Another enjoyable perk of working from home

Table 5: Frequency and percentage analysis of the mitigation actions to overcome the challenges of working from home

Mitigation Action	Mean Score	Positive Responses (Strongly Agree and Agree)		Neutral		Negative Responses (Strongly Disagree and Disagree)	
		Freq.	%	Freq.	%	Freq.	%
Create a dedicated workspace	4.68	322	92	5	1.4	23	6.5
Set goals and prepare to-do list	4.61	317	90.5	6	1.7	27	7.7
Identify the working hours and stick with it	4.60	315	90	8	2.3	37	7.8
Quantity Surveying firms need to reduce the barrier of bringing private and confidential documents home, control and provide access to only persons involved in that project only	4.60	315	90	8	2.3	37	7.8
Maintain the same routine as if going physically to the office	4.55	311	88.9	5	1.4	34	9.7
Check if the current Internet connection at home is ideal or needs an upgrade	4.51	305	87.1	5	1.4	40	11.4
Make time to connect with co-workers, friends and family	4.37	288	82.3	11	3.1	51	14.6
QS firms must build an innovative business model and have a flexible system to encourage QS to work from home	4.05	265	75.7	4	1.1	81	23.1
Create a daily schedule	3.00	177	50.6	7	2	166	47.4
Post a sign at the door to minimise distractions	2.87	154	44	9	2.6	187	53.4

was not having to wake up early, rushing out of the house and commuting to the office. However, this does not mean that employees get to skip their morning routine altogether. Moreover, 87.1% of the respondent's (M=4.51) mentioned the need to check if their current internet connection at home is ideal or needs an upgrade which was another action to mitigate the challenges while working from home during

the pandemic. To begin with the setting up of the home workspace, employees should test the speed of their Internet connection to ensure that it is fast enough for their needs. Employers may provide employees with the appropriate office equipment such as an adjustable office chair with armrests or a display that can be adjusted to eye height. This also includes decent Internet packages (Gerding *et al.*, 2021). Furthermore,

82.3% of the respondents (M=4.37) agreed to make time to connect with co-workers, friends and family. When conducting work remotely, associating with co-workers or friends does not have to be a pain, a chore or a struggle. Staying connected with them should come naturally whether it is speaking with family, friends or co-workers. Subsequently, 75.7% of the respondents (M=4.05) agreed that QS companies need to build an innovative business model and have a flexible system to encourage QS to work from home. This could be an option for the company to be competitive in securing good talent. Furthermore, 50.6% of the respondents (M=3.00) agreed that another mitigation action for the challenges of working from home was creating a daily schedule. They believed that not having a set schedule was among the most common blunders made employees working from home. The last mitigation action voted by 44% of the respondents (M=2.87) was that employees should post a sign at the door to minimise distractions. If employees do not display a sign, it will break their concentration and they may have to work 10 times harder. Table 5 itemises the frequency and percentage analysis of the mitigation actions to overcome the challenges for QS working from home.

### **Limitation of Study and Recommendation for Future Research**

This study is limited as the data collection exercise was performed while the MCO restrictions by the government were in effect. Nevertheless, it opened opportunities for the researchers to explore other angles regarding the subject matter, and allowed them to include in the survey a larger population, sample size and other regions in Malaysia. Future studies can explore the acceptance of working from home in the QS profession.

### **Conclusion**

The study provided recommendations that might be useful to QS who need to work from home during these tough times. QS companies

would be able to understand the concerns that employees are facing. The present pandemic might influence how tasks are delivered. The time that employees spent holding a conversation and reading documents during long commutes is being replaced by time spent online. Working from home has its advantages and disadvantages. QS companies can no longer ignore working from home as an option for employees. On the plus side, the work-from-home arrangements may encourage young talents by providing them as an incentive to join the companies. By just offering the work-from-home arrangement as an option for employees, it would give the company an advantage over competitors who do not provide such an option. This could increase productivity, which is common in an office atmosphere. Working from home could provide a more tranquil setting that might lead to a more focused employee. Individuals might also work harder and longer, though they could use the experience gained from commuting to start operating earlier, later or both.

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