

FACING THE COVID-19 CRISIS: A STUDY OF CHALLENGES AND STRATEGIES OF CONSULTING FIRMS OF QUANTITY SURVEYORS IN MALAYSIA

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ABSTRACT

The COVID-19 crisis is widely regarded as the most severe worldwide health crisis of the century, affecting the economy and our everyday life. It has primarily posed a problem to the construction industry, notably consulting businesses that provide Quantity Surveying (QS) services. Some of the QS consultancy firms' challenges is the wellbeing of the employees and employers, financial issues, and the sustainability of their business during the crisis. Therefore, QS firms must plan for a proper organisational strategy to face these issues. The main objective of this paper is to identify the implementation of strategic management by local firms during the COVID-19 crisis. This paper used a Quantitative approach which involved a total of 393 local QS firms. The response rate is 32 percent. As a result, several COVID-19 challenges, strategies, and advantages were identified and listed. Also, an analysis of Friedman's Test was used in this study. Through this analysis, this paper found that the strategies used has a significant impact on the benefits. This main finding suggests that strategic planning does have a beneficial impact on the practised QS firms in this crisis. This paper contributes to understanding how strategic planning helps QS firms adjust to the COVID-19 crisis and influences more QS firms to adopt strategic management.

Keywords: Construction industry, Quantity Surveying Firms, Strategic Planning; COVID-19, Malaysia.

INTRODUCTION

COVID -19 has posed economic, environmental, and social issues to society in addition to its impact on our health (Chakraborty & Maity, 2020). COVID -19 is a key topic in most recent study, and it has been covered in several literary writings. The majority of the publications focused on the pandemic's impact on the labour market and people's employment in various countries. As a result, the economy of industrialised countries, including Malaysia, has slowed as a result of this crisis. In response to the rising number of illnesses and deaths among Malaysians, the Ministry of Health and the Malaysian government issued a Movement Control Order (MCO) on March 18, 2020. This restriction is a preventative measure that has resulted in the closure of the majority of private and state-owned businesses. The Malaysian economy has declined by 8.3 percent in the first half of 2020 after the MCO was implemented in March (Department of Statistics Malaysia, 2021). Tourism, education, sports, and, most notably, construction industry are all affected by the slowdown. In the early days of the MCO, this industry alone had lost a total of RM18.5 billion (Harun & Abdul-Razak 2020). In the construction sector, quantity surveying (QS) is

extremely important. QS has been involved in every phase of a construction project, from the feasibility phase to the design phase and handover phase. Quantity surveying, according to RICS (2017), encompasses a wide range of industries, including property, infrastructure, and process engineering. While some businesses can simply continue to grow, others are still battling to stay afloat in this new environment. Small and large businesses make up the QS consulting firms. For most Malaysian QS businesses, business competitiveness and viability during a pandemic can be a major issue. Assume a QS firm hasn't properly prepared its strategy to meet its business goals while adapting to the new normal. In that instance, the company could lose money or perhaps go bankrupt in the future (Greenley, 1986).

Strategic planning is a methodical process that assists an organisation in identifying future possibilities and risks by collecting important data that leads to efficient decision-making (Steiner 2010). In other words, this approach assists a business in achieving its vision and goal, as well as guiding the organisation in anticipating any future uncertainties or obstacles. As a result, proper strategic management planning is critical for an organization's existence. As the threat of COVID-19 has grown in the construction industry, QS organisations must learn to adapt to the pandemic and develop a new long-term strategic management plan. This study aims to look at how the COVID -19 crisis impacted local QS companies and how they used strategic management to withstand the crisis. It will also study into the effectiveness of putting these procedures in place.

COVID-19 CHALLENGES AND STRATEGIES FOR QS CONSULTING FIRMS

Safety and Health Challenges

Due to the pandemic, the most apparent challenge at a construction firm is health and safety. Safety officers in construction companies are in charge of organising COVID-19 preventive measures in the workplace. According to HSE Network (2020), once the COVID -19 prevention and safety plan has been established by the safety officers, it is difficult to apply the preventive measures among the workers/employees as well as to ensure that they are practicable. Because major construction activity necessitates a large number of people at once, social distancing is a challenge. However, one method of preventing COVID -19 transmission between workers is to practise social distancing. While other industries may be able to encourage the majority of its employees to work from home, this is not the case in the construction industry. Another safety and health issue of concern to construction company owners is the impact of COVID -19 restrictions on their employees on risks such as fatigue and psychological effects on their mental health (Alsharef, Banerjee, Uddin, Albert, & Jaselskis, 2021). Construction companies are likely to be compelled to lay off a number of workers or prolong their working hours away from their families and friends, causing them stress as a result of the abrupt change in work environment. People who are affected include individuals who work on the building site, their family members, and those who are concerned about their jobs. Many construction workers have reportedly tested positive for COVID-19 on-site, which is a huge health and safety concern. Employers with projects in Kuala Lumpur, particularly in the Klang Valley, where COVID-19 cases have been identified, must always be aware of the possibility of disease transmission among workers. According to Kaos (2020), across all cluster groups in Kuala Lumpur, construction workers had the biggest increase in positive COVID-19 occurrences. Furthermore, a study by Pasco, Fox, Johnston, Pignone, and Meyers (2020) discovered evidence that construction workers are five times more likely than other workers to be hospitalised with COVID-19.

Supply and Demand Challenges

Supply and demand are some of the issues that the construction business will be dealing with during the pandemic. Every project in the construction industry revolves around transactions. The cost of a transaction will always have an impact on the economy. Most economists and analysts, according to Baldwin and Di Mauro (2020), believe the economic impact is critical. The construction industry must evaluate these economic mechanisms in order to determine whether the markets are as high or low as they appear (Gruneberg, 1997). The economy will be severely impacted if the government decides to shut down a corporation or company as a COVID-19 preventative measure. Drastic supply changes (supply shocks) caused by pandemics, according to del Rio-Chanona (2020), are generally regarded labour supply shocks. Before COVID -19, there were a few studies that looked at direct labour loss owing to illnesses or deaths. One of them is studies by McKibbin and Sidorenko (2006). Apart from that, Santos, Barros, Mendes, and Lopes (2013) have pointed out that, among other shocks, the decrease in labour supply is primarily attributable to infection-related mortality and illnesses. Social distancing has a far more significant impact on the economy than the direct effects of mortality and morbidity. This is because, if the preventive intervention of social distancing is effective, the virus will afflict only a small number of people, benefiting the economy. In construction, it is generally almost impossible for workers to work from home like other businesses. Consequently, construction workers are most likely to have their hours reduced or lose their employment entirely (del Rio-Chanona et al., 2020).

The actual demand in the construction industry is determined by how many construction services and projects clients or builders wish to purchase. It's a demand that's backed up by buying power. Demand would be regarded ineffective if there was no effective transaction between two parties (Gruneberg, 1997). Previous research on epidemics, as well as conversations about the current crisis, have revealed that epidemics have a significant impact on consumer purchasing behaviour. Consumers are continually on the lookout for ways to reduce their risk of catching the virus, resulting in decreasing demand for goods and services.

Financial Issues

Financial issues have also arisen as a result of the epidemic for construction businesses. Due to government limitations and labour and material shortages, companies have been compelled to prioritise the health and welfare of their employees, as well as deal with delays and project extensions as a result of the Coronavirus outbreak. When the recession is gone, and it will be, construction companies' first focus will be to cope with the financial crisis' consequences (Elbogen, Lanier, Montgomery, Strickland, Wagner, & Tsai, 2020). When a project is delayed, the parties on the paying side of the contract, such as the clients, will devise a strategy for managing claims that will benefit them financially. The customer may be slow to pay contractors and consultants or allege that they are not liable to the delay damages. If this happens, the contractor's financial plan is definitely at stake (National Law Review, 2020). Furthermore, assuming the disease is spread among personnel on the job site or in the office. In this instance, the construction companies are at a severe disadvantage because they must shoulder the expense of the occurrence (Shibani, Hassan, & Shakir, 2020). Despite the fact that there are safety and prevention measures in place to prevent Coronavirus transmission among employees, there is still a possibility of the disease spreading at the workplace or lodging. If an employee informs their supervisor that they have tested positive for COVID -19, the supervisor will look into the person's close contact first. To prevent the sickness from spreading further in the workplace, the supervisor must act

swiftly (Ministry of Human Resources Malaysia, 2020). Construction companies may have to halt operations for at least 14 days to allow all affected workers to be quarantined.

Strategic Planning for QS Firms During COVID-19 Crisis

Following the first MCO in March 2020, Malaysia's absolute lockdown has been lifted, and the construction industry has begun to operate. In this fast-changing world with constant change in the environment, Baskin (1995) emphasises the need of an organization's adaptability. Organizations must swiftly and efficiently learn from and adapt to their environment, or they will be forced to watch their firm die. To reopen their business, local QS consultancy firms must grasp and adapt to the government's new standard procedure (SOP). Developing a strong contingency plan and cash flow analysis, according to Sood (2020), will enable businesses to maintain operations and facilitate recovery with reduced capacity after the crisis is over. To avoid spread, the first action QS firms can do before starting work in their workplace is for employers to establish safety and health regulations (Ministry of Human Resources Malaysia, 2020). COVID-19 is a human problem that necessitates a human solution in order to limit the risks, so employers must prioritise them. Encourage social distancing methods, wear a mask at all times during office hours, and reduce the number of individuals working in the office at the same time are some of the standard guidelines that the government has set for office workers.

Furthermore, the utilisation of virtual meetings has grown in popularity. Virtual meetings via online communication programmes such as Google Meet and Zoom Meeting have aided society in using climate-friendly conferences and reducing air travel that can lead to disease transmission, particularly during the outbreak of COVID-19. Individuals can attend events via web conferencing when they are unable to participate in person owing to visa concerns, travel costs, or other circumstances such as cross-country prohibitions, according to Diplomacy Edu (2020). For a period, the company QS was unable to operate due to the blockade. Companies must first examine their outstanding work and cash flow after they have begun to change how they do business. Companies in the QS sector may need to spend time analysing the financial impact of environmental changes and preparing a cash flow forecast that will be impacted by the changes (Brews & Purohit, 2007). They may also cut administrative expenditures to help with the financial difficulties. As a cost-effective strategy, several partners or directors of firms of businesses have taken wage reductions or layoffs (Gangcuangco, 2020).

METHODOLOGY

The purpose of this paper's research is to uncover COVID-19 concerns and the types of strategic planning used by QS consulting firms in Malaysia during this crisis. In addition, the purpose of this paper is to look into the efficacy of strategic planning approaches. The data for this study was gathered using a quantitative technique from local QS consulting firms. Through hypotheses and data gathering processes, quantitative research is undertaken to confirm ideas of strategic planning implementation. Identifying the COVID -19 issues, as well as the style of strategic planning adopted by QS companies throughout the pandemic, was a feasible outcome for this paper. Another result of these questionnaires is the potential influence of the initiatives on QS businesses. For this study, the quantitative technique was chosen as the most appropriate way for achieving the defined goals. This technique was chosen since there is a lot of data that needs to be collected in order to figure out what strategies QS firms used throughout the pandemic. The use of questionnaire surveys allows for the collection of large amounts of numerical data in a short amount of time. The overall number of target groups for this study is 393, which is a big number because it includes all

Malaysian QS consulting firms. The responses, on the other hand, will be gathered from a broad sample in order to reflect the views of the entire population.

After the questionnaire’s design and sampling size have been chosen. The questionnaires will be sent out through email to the intended respondents. The BQSM website provides the email addresses and phone numbers of the QS firms. The questionnaire will be designed using Google Forms to make it easy for responders to complete the survey. The survey was included to the email through hyperlinks, along with a formal statement outlining the study’s goals and objectives. The questionnaire will be sent out via email to all 393 QS consultancy companies in Malaysia. Slovin’s Formula was used to determine the sample size for this study, which was 198 QS businesses. This study relies purely on respondents’ willingness to answer each question in the survey; thus, all responses are unbiased and based on their knowledge of the study.

After that, 127 people responded to the survey after it was distributed for three months. The number of responses received represents around 32 percent of the total number of QS enterprises in Malaysia. The response rate is more than 30 percent, which is deemed average for this study’s data analysis to continue. Statistical Package for the Social Sciences (SPSS) software was used to analyse the data. A reliability test was performed on all respondents’ collected data to confirm that each survey question is reliable and understandable by all respondents, and the result of the Cronbach’s Alpha value is 0.851, which is close to the value of 1. When Cronbach’s Alpha is close to 1, the data is considered to be the best and most exceptional. The alpha coefficient for the 25 questions is 0.831, indicating that they are relatively consistent internally. As a result of the study’s trustworthy test, it can be determined that the question posed in this survey is reliable and understandable to all responders.

RESULTS AND DISCUSSION

Identified Challenges

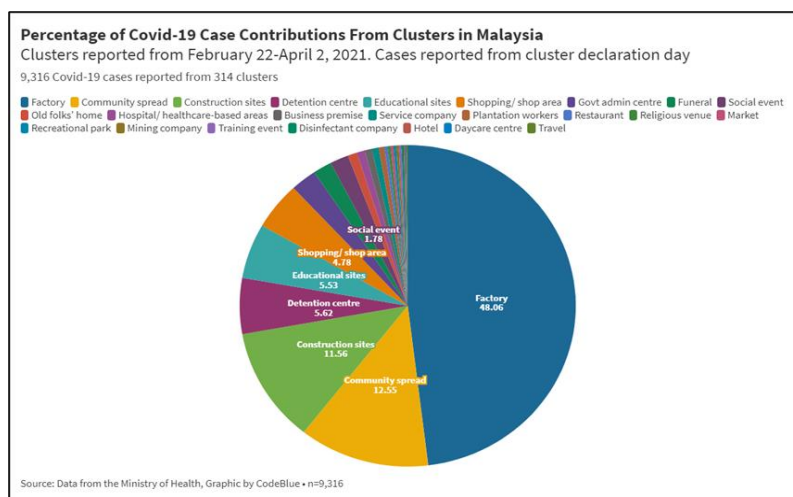


FIGURE 1
PERCENTAGE OF COVID-19 CASE CONTRIBUTIONS FROM CLUSTERS IN MALAYSIA (A CONCERNED NATIONALIST, 2021)

Construction sites are one of the most significant contributors to the occurrence of COVID -19 patients, as illustrated in Figure 1. As a result, it’s unsurprising that this epidemic

has a big influence on the construction business. According to a research by Shibani et al. (2020), the main impact of the pandemic on the construction industry is that most projects must be halted and working hours must be extended. As a result, customers have ceased investing in home construction and company development, causing construction enterprises to suffer considerable losses. Furthermore, the outbreak has put construction companies in a financial bind, as they are unable to receive cash from consumers or banks due to the disease. Moreover, the COVID -19 epidemic has caused some projects to be postponed owing to a lack of building supplies, as the blockade has made material supply much more difficult and impossible.

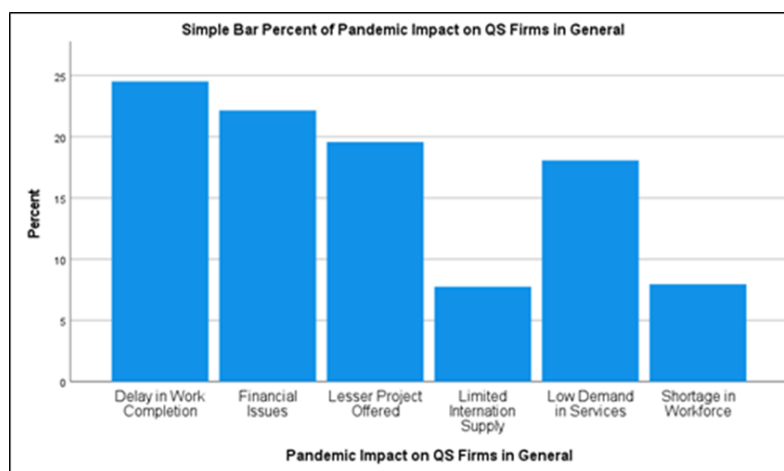


FIGURE 2
DISTRIBUTION OF PERCENTAGE OF PANDEMIC
IMPACT ON QS FIRMS

In this research, a quantitative research had been conducted to find out the impact of COVID-19 to the QS firms in Malaysia. A set of questionnaires had been distributed to 393 QS firms and 127 sets of questionnaires returned and answered. Based on the questionnaires submitted, 127 out of 127 responses (100%) agreed that the COVID-19 pandemic had impacted their business operation. Some of the issues that QS firms had faced during the pandemic that were found in this research are as per below:

- Lesser projects or services offered compared to before the pandemic.
- The company generates lesser profit compared to before the pandemic.
- The company had to lay off several employees to support the company's financial capabilities.
- The company experiences shortage of workforce during the pandemic.
- The services/work done by the company is delayed.
- Low demand of consultation/quantity surveying services.
- The company had to deal with financial issues and limitations.
- Re-opening business is considered challenging after the first lockdown.
- Limited international supplies and resources during the pandemic and lockdown.

Identified Strategies

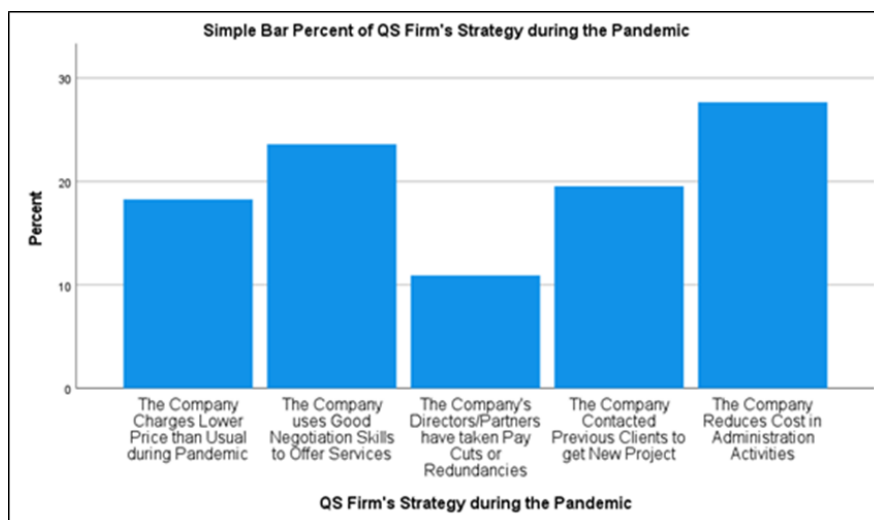


FIGURE 3
DISTRIBUTION OF PERCENTAGE OF QS FIRM'S STRATEGIES
DURING THE PANDEMIC

To uncover all of the QS firms' approaches, this study began with a review of the literature on strategic planning and management, as well as how they connect to QS firms' practises during the epidemic. Following the listing of alternative methods, the QS businesses were given a set of questionnaires that included closed-ended, open-ended, and Likert-scale items. Because all respondents to this study were anonymous, the questions were answered objectively and in accordance with the companies' suitability and practicality. The majority of respondents stated that their company had implemented the majority of the strategies listed below:

- To secure the company's productivity, QS businesses quickly plan for strategic management.
- As soon as the QS companies began operations, they implemented a proper safety and health policy.
- The QS firms had contacted previous clients in order to obtain new projects or to resume tasks that had been left unfinished prior to the initial MCO.
- During the epidemic, QS firms charge a lower price for products or services than they did before the pandemic.
- During the epidemic, the QS firms employed good negotiation abilities to attract new clients by offering services.
- To control the company's financial expenditure flow, QS firms cut costs in administrative activities.
- To deal with the company's financial difficulties, the directors or partners of the QS firms have taken wage cuts or been laid off.
- To decrease virus transmission and establish a safer office environment, QS firms encourage their workers to work from home (WFH).
- Rather than holding a face-to-face meeting, the QS firms advocate the use of communication technology tools such as Google Meet, Zoom Apps, and WhatsApp.
- During the epidemic, QS firms encourage their employees to use taking-off tools such as CostX and Buildspace.

Identified Benefits

A list of advantages of implementing strategic planning were identified from literature review and evaluated based on the suitability of QS firms during the pandemic. The set of

questionnaires returned by the respondents had confirmed that most of the companies had experienced the advantages after they had practiced strategic planning and management. From the study, 120 responses (94.5%) out of all 127 responses agreed that strategic planning has helped the company to stay productive. Other identified impact of practising strategic planning in local QS firms is:

- Implementing strategic planning has helped boosting work productivity of the QS firms.
- In adapting the new normal of COVID-19 pandemic, the QS firms has followed strictly in their strategic planning to stay in business.
- Strategic planning has helped the QS Firms in the adaptation of the new COVID-19 safety and health protocols released by the government.
- Once the QS firms resumed their business operation, strategic management has become the top priority activity perform within the employers and employees.
- Strategic planning has helped QS firms building up on new projects during the pandemic.
- Strategic planning has helped QS firms to generate more company income during the pandemic.

Friedman's Test Analysis and Discussion

The surveys were subjected to a normalcy test. Despite the high sample size, the results revealed that both data are not regularly distributed (30). Although violations of normality have little influence on large samples and the researcher can utilise parametric procedures for this study (Elliot and Woodward, 2007), non-parametric tests for non-normal ordinal data can provide a more clinical assessment (Sheldon, Fillyaw and Thompson, 1996). The Friedman test is used in this study as an alternative to the ANOVA test to determine the relationship between the strategies and the benefits. Both variables have the same median, which is 4.00.

Table 1	
MEAN RANK OF STRATEGIC PLANNING AND ITS BENEFITS	
	Mean Rank
Strategies	1.59
Benefits	1.41

Table 2	
RESULT OF FRIEDMAN'S TEST	
Test Statistics	
N	127
Chi-Square	7.579
df	1
Asymp. Sig.	.006

The formulation of the research hypotheses for this Friedman test is the null hypothesis (H0). It is assumed that the independent variable, strategic planning, does not affect the dependent variable, the benefits of implementing the strategies. The alternative hypothesis (H1), on the other hand, states that the independent variable, strategic planning, influences the dependent variable, the benefits of implementing the strategies. The result of the Friedman test in Table 3 above shows that the chi-square statistic is 7.579 and the p-value = 0.006 (0.05). Therefore, at a 0.05 level of significance, it can be concluded that H0 is rejected and H1 is accepted. The relationship between the variables is statistically significant. Therefore, it can be inferred that strategic planning has a significant impact on the identified benefits.

Relative Important Index (RII) Analysis and Discussion

Numerical scores that were collected from Likert-scale survey responses provide hints about the type of challenges faced, strategic management and its benefits of QS consulting firms in Malaysia during the pandemic. Relative importance index (RII) is used to identify the variable of variance for the possible overall variance.

Challenges	Relative Important Index (RII)	Ranks
After the first MCO in March 2020, the QS firms earn a lower profit.	0.861	1
Several staff have been laid off by the company.	0.614	3
After the first MCO, the company is having problems reopening its operations.	0.791	2
Strategies	Relative Important Index (RII)	Ranks
To ensure productivity, the organisation implemented a strategic management plan soon after the first MCO.	0.876	2
During the crisis, the corporation encourages the use of take-off software.	0.709	4
Instead of face-to-face meetings, the company encourages the use of communication technology.	0.921	1
To promote a safer workplace, the business encourages employees to work from home (WFH).	0.780	3
Benefits	Relative Important Index (RII)	Ranks
The company's strategic management has assisted it in adapting to the new COVID-19 Safety and Health procedures.	0.882	1
During the crisis, strategic management has been a top priority activity in the organisation.	0.854	2
During the crisis, strategic management has aided in the development of new projects.	0.759	4
During the crisis, strategic planning helped the corporation produce more revenue.	0.775	3

Based on Table 3, the highest rank for Challenges is “*The QS firms earn a lower profit*” with (RII value=0.861), followed by “*The company is having problems reopening its operations*” (RII value=0.791), and “*Several staff have been laid off by the company*” (RII value=0.614). Next, the highest rank for the identified strategies is “*The company encourages the use of communication technology*” with (RII value=0.921), followed by “*The organisation implemented a strategic management plan soon after the first MCO*” (RII value=0.876), and “*The company encourages staff to work-from-home (WFH)*” (RII value=0.780). The last rank for strategies is “*The corporation encourages the use of take-off software*” with (RII value=0.709).

Lastly, the highest rank for Benefits is “*Strategic management has assisted it in adapting to the new COVID-19 Safety and Health procedures*” with (RII value=0.882), followed by “*Strategic management has been a top priority activity in the organisation*” (RII value=0.854), and “*Strategic planning helped the corporation produce more revenue*” (RII value=0.775). The last rank for benefits is “*strategic management has aided in the development of new projects*” with (RII value=0.759).

CONCLUSION

In this paper, a broad aspect of the strategies implemented by the companies of QS has been considered and presented by reviewing previous studies and examining the suitability of the practices in this COVID -19 era. The study's findings show that most of the QS companies have already realized the importance of strategic planning practices during the pandemic. This paper also identified several benefits that can be derived from the implementation of the strategies. The results of the Friedman test of this study showed that strategy has a significant impact on the benefits. The three most used strategies among the local QS companies are: (i) The company promotes communication technology instead of face-to-face meetings. (ii) The company plans strategic management immediately after the first MCO to ensure productivity. (iii) The company encourages its employees to work from home. The proposed strategic planning aims to guide QS consulting firms to adapt to the COVID -19. Local QS companies can better understand the strategic planning to run their business in this COVID -19 crisis through the listed strategies and benefits. Moreover, QS companies can choose an appropriate strategy according to their business size and resources. QS companies can also determine their strategic planning through this research. The main contribution of this paper is to help QS companies to stay in business and survive during the recession of the economy caused by COVID -19.

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