

SURVIVAL STRATEGIES OF KLANG VALLEY MALAYSIAN SMALL AND MEDIUM BUILDING CONTRACTORS IN THE POST-COVID-19 ERA

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Abstract

The post-COVID-19 era in Malaysia's busiest area, Klang Valley, necessitates an examination of the survival strategies used by small and medium building contractors in the construction industry, which are numerous in a developing country like Malaysia and contribute significantly to the country's economy. As a result, the purpose of this study was to investigate the survival strategies and perceived success of Klang Valley Malaysian small and medium building contractors in the post-COVID-19 era, to uncover the strategies that would ensure the small and medium building contractors' continuous survival. In this study, a survey approach was used, and building contractors in six grades ranging from G1 to G6 of CIDB Malaysia registered building contractors were sampled using a structured questionnaire. Mean ranking and factor analysis were used to analyse the data collected. The top five important survival strategies were as follows: (1) effective financial management, (2) upgrading of the skills of employees for productivity improvement, (3) improvement of service quality performance, (4) improvement of problem-solving capabilities, and (5) efficient marketing. The factor analysis method was used to identify the underlying factors of survival strategies such as diversification, networking, and innovation strategies; workforce management strategies; and financial management strategies. The effects of organisational survival on small and medium building contractors' perceived success in terms of business growth, profit growth, and employment growth were also investigated. This study raised awareness and deepened our understanding of the survival strategies used by Klang Valley Malaysian small and medium building contractors, as well as how their organisational survival was perceived.

Keywords: *Survival strategies; Klang Valley Malaysia; Small and medium building contractors; Post-COVID-19 era.*

INTRODUCTION

The COVID-19 pandemic erupted in December 2019. It resulted in the deaths of many people. The COVID-19 pandemic has had a negative impact on many countries, particularly in the economic sector. The post-COVID-19 era saw the formation of a challenging economy.

The global financial crisis of 2007 was one of the most shocking economic events in world history. It had an impact on the industries and economies of many countries at the time. Construction firms in developing countries, such as Sri Lanka, have implemented several strategies in response to the challenging economy; however, many of these strategies can only address short-term issues. Many building contractor firms failed to implement appropriate survival strategies during the difficult economic times, resulting in insolvency or termination (Tansey et al., 2014).

Survival is defined as the act or fact of surviving, particularly in harsh or unusual conditions. On the other hand, survival is the most important aspect of any company's operations, and survival is the organisation's top priority before pursuing any other benefits (Adewale et al., 2011). Strategy can be defined as an all-encompassing plan devised by an organisation and its various components to achieve a desired end state in the future. Following that, strategy can be defined as the use and allocation of an organisation's limited resources to achieve its existing goals.

In Ireland, four of the top ten construction firms were unable to survive in the challenging economy, and the number of construction firm failures increased. Survival strategies were discovered in Singapore when most contractors decided to bid on jobs that were within their capabilities during the difficult economic times (Teck Heng Lim et al., 2010). In New Zealand, on the other hand, survival strategies included focusing on establishing relationships with main contractors, implementing strict financial management on a firm's cash flow, and implementing strict site management to reduce material and time waste. During a difficult economic period, building contractors in the United Kingdom, the United States, Hong Kong, and Japan implemented a variety of strategies such as advertising, technology or innovation, project management, and reorganisation (Tansey et al., 2014).

Ogbu (2017) conducted a study to determine the critical factors of construction industry survival strategies in a West African country, such as Nigeria. Human resource management, marketing, bid strategy, financial management, organisational culture, smart execution methods, and firm strategy were among the factors considered. According to the study, the marketing factor is the most important, while the organisational culture factor is the least important. The research assists indigenous construction firms in identifying the factors that contribute to their survival practises.

Aghimien et al. (2018) conducted a study on the survival strategies of Nigerian building contractors in a bad economy. Their research discovered that building contractors recognise the importance of effective management to operate in a challenging economy.

Throughout the years, many previous studies on the survival strategies of construction organisations around the world have demonstrated the significance of this issue. The post-COVID-19 era has brought about a new normal in all industries' work routines. There is no exception in the construction industry. The presence of COVID-19 introduces a new set of problems to the economic sectors, particularly since many people have been forced to work from home and businesses have been forced to close to prevent the disease from spreading, likely resulting in another economic downturn in no time.

Assessing the survival strategies used by small and medium building contractors is critical because these firms are numerous in developing countries such as Malaysia, and together they form the built environment that supports the nation's development. Unfortunately, these firms are vulnerable and easily influenced by economic conditions; they will either succeed and grow into large corporations, or they will decline and disappear from the industry. Studies on construction firm survival strategies will help provide evidence on how firm survival occurs in the country. This study investigated the survival strategies and perceived success of Klang Valley Malaysian small and medium building contractors in the post-COVID-19 era. This study's findings are expected to serve as a guide for small and medium building construction

business owners in developing effective and efficient survival strategies to sustain and remain active in the industry.

LITERATURE REVIEW

After manufacturing and agriculture, Malaysia's construction industry is the third largest in terms of output. The construction industry is defined as a sector of the country's economy that is involved in land planning and construction, as well as the modification and renovation of property, structures, and other real estate. This industry is critical to any country's economy (Awolele et al., 2019). It is one of the economic sectors that used resources to build economic and social infrastructure.

Table 1. List of Survival Strategies and Sources

Ref	Survival Strategy	Source
SS01	Diversification into other companies related to construction	Ogbu (2017), Ye et al. (2017), Aghimien et al. (2018), Ulubeyli et al. (2018)
SS02	Effective financial management	Ho (2016), Ogbu (2017), Ojera (2018), Sabug and Pheng (2018)
SS03	Diversification into related practices based on professional expertise	Ling and Li (2016), Sabug and Pheng (2018)
SS04	Upgrading of the skills of employees for productivity improvement	Mishra and Smyth (2015), Panda (2015), Ogbu (2017), Roshchin and Travkin (2017)
SS05	Reduction in fees for services	Ogbu (2017), Aghimien et al. (2018)
SS06	Efficient marketing	Hsu (2016), Ogbu (2017), Aghimien et al. (2018), Hammerschlag et al. (2020)
SS07	Improvement of service quality performance	Dauda and Lee (2016), Pattanayak et al. (2017), Aghimien et al. (2018)
SS08	Layoff and reduction of employment	Ogbu (2017), Aghimien et al. (2018), Abbaspour and Dabirian (2019)
SS09	Changing of geographical location	Aghimien et al. (2018), Silva and Moreira (2019), Viswanathan and Jha (2019)
SS10	Cooperation partnerships	Colavitti and Usai (2015), Aghimien et al. (2018), Freytag (2019)
SS11	Improvement of corporate culture through activities that prioritise goals and responsibilities	Naqshbandi et al. (2015), Belak (2016), Kumar and Sharma (2018)
SS12	Improvement of problem-solving capabilities	Worley and Doolen (2015), Hämäläinen et al. (2017), Lee-Post (2019)
SS13	Use of emerging technologies or innovations	Oly Ndubisi and Agarwal (2014), Tsou et al. (2014), Batra et al. (2015), Valmohammadi (2017)
SS14	Purchase of resources	Sánchez-Rodríguez et al. (2019), Lafuente et al. (2020)
SS15	Improvement of the organisational framework	Bonanomi et al. (2019)
SS16	Effective networking to enhance reach	Sullivan and Ford (2014), Leung et al. (2019), Sharafizad and Brown (2020)
SS17	Investment in various businesses	Sort and Nielsen (2018), Nguyen (2019)
SS18	Contract conflict risk mitigation by contract management	Cheung and Pang (2013), Treacy et al. (2016), Besaiso et al. (2018)

Small and medium building construction enterprises in Malaysia are generally classified based on their CIDB Malaysia registration grades. Building contractors are classified by CIDB Malaysia into seven grades, ranging from G1 to G7. Building contractors in grades G1 to G3 are considered small building contractors, while those in grades G4 to G6 are considered

medium building contractors. Grade G7 building contractors are considered large building contractors because they are the only group that can participate in construction projects of any value without restriction (Mustafa Kamal and Flanagan, 2012).

Building contractors can benefit from a survival strategy to gain a better understanding of the company. It has the potential to improve employee leadership and capability. It can also help building contractors identify and address flaws, as well as mitigate risks (Mahmood et al., 2017). A building contractor firm cannot move forward or determine its market position in comparison to its competitors without a survival strategy. The survival strategies identified in the review of literature are shown in Table 1.

Survival strategies implemented by Klang Valley Malaysian small and medium building contractors may result in perceived success for the firms, such as business growth, profit growth, and employment growth.

Business growth was one of the most important aspects of any organisation because it reflected a company's success. Business expansion denotes an increase in the firm's size (Hanifzadeh et al., 2018). Historically, the success of an organisation was linked to business growth. Business growth boosted the competitiveness of small and medium-sized businesses (Ahonen, 2019). The firm's strategies were a factor that influenced the growth of a business in a difficult economy. A significant benefit that resulted from the expansion of the company was the addition of new employment opportunities.

Profit, according to Sitorus and Christian (2019), can be defined as a reward for firms' efforts to produce goods and services. Profit can also be defined as an excess of income over the total costs of producing and delivering goods or services (Sitorus and Elinarty, 2017). Profit growth was defined as an increase in profits earned by the firm expressed as a percentage. Profit growth indicated that the firm's finances were sound, which increased the firm's value.

According to a study conducted by Rafiki (2020), observed firm growth can be measured in a variety of ways, including employment, resources, and sales. Employment growth is linked to a company's success, and employment growth is a process that increases the rate of employment. More employees were needed by a company to complete heavy work that would generate revenue for the company's operations. The goal of job creation was to improve a company's ability to accept and complete projects. Torkkeli et al. (2016) discovered that employment growth can influence a firm's networking and thus lead to firm success.

RESEARCH METHODOLOGY

This study was carried out to investigate the survival strategies and perceived success of Klang Valley Malaysian small and medium building contractors in the post-COVID-19 era. The findings of this study will assist Klang Valley Malaysian small and medium building contractors in surviving in the post-COVID-19 era. This study used a questionnaire survey approach to collect quantitative data from Klang Valley Malaysian small and medium building contractors, as Ogbu (2017) did. Small building contractors ranging from CIDB grade G1 to CIDB grade G3 and medium building contractors ranging from CIDB grade G4 to CIDB grade G6 operating in Klang Valley, Malaysia were the study's targeted respondents.

Questionnaire surveys are one of the most widely used social research methods for collecting data for research studies (Blaxter et al., 2013). A questionnaire survey is a method of gathering data based on a sample size (Keong, 2012). It can accommodate a broader range of research participants and is simple to implement. Because the respondents for this study were spread across Klang Valley, Malaysia, a questionnaire was deemed the best tool for data collection.

The questionnaire used was divided into three sections. Section A asked questions about demographic information such as the CIDB grade of contractor, category of work, position in the firm, and years of working experience. In Section B, the literature review was used to summarise a total of 18 survival strategies that can assist Klang Valley Malaysian small and medium building contractors. The respondents were asked to rate the effectiveness of all 18 survival strategies used to ensure the continuous survival of small and medium building contractors in Klang Valley, Malaysia, on a 5-point Likert scale, where 1 point indicates 'strongly disagree', 2 points indicate 'disagree', 3 points indicate 'neither agree nor disagree', 4 points indicate 'agree', and 5 points indicate 'strongly agree'. Section C included questions about three indicators of perceived success, which included statements from the literature review summarising business growth, profit growth, and employment growth. Similarly, respondents were asked to rate their perceived success in terms of business growth, profit growth, and employment growth because of organisational survival on a 5-point Likert scale, where 1 point indicates 'strongly disagree', 2 points indicate 'disagree', 3 points indicate 'neither agree nor disagree', 4 points indicate 'agree', and 5 points indicate 'strongly agree'. On the collected data, mean ranking and factor analysis were performed to identify the significant survival strategies and underlying survival strategies for Klang Valley Malaysian small and medium building contractors to survive in the post-COVID-19 era.

Minimum sample sizes for factor analyses range from 3 to 20 times the number of variables, with absolute sample sizes ranging from 100 to over 1,000 (Mundfrom et al., 2005). To meet the requirements, the average times $[(20 \text{ times} - 3 \text{ times})/2 + 3 \text{ times} = 11.5 \text{ times}]$ were calculated and multiplied by 21 variables (the number of variables investigated in this study). According to the calculations, this study would require at least 242 responses. A total of 625 sets of questionnaires were distributed after considering the response rate of a previous questionnaire survey conducted to determine the response rate of construction professions, which revealed a 40% response rate (Boschman et al., 2012). At the end of the data collection period, 260 responses were collected, indicating a response rate of 41.60 per cent. However, only 250 valid responses were used in the data analysis.

RESULTS AND DISCUSSIONS

Background Information of Respondents

Table 2 depicts the demographic profile of respondents. Overall, the findings of this study were derived from the perceptions of construction practitioners from various backgrounds and levels of experience. In terms of sample size, this study collected a comparable number of responses from small building contractors ranging from CIDB G1 to CIDB G3, accounting for 49.6 per cent; and medium building contractors ranging from CIDB G4 to CIDB G6, accounting for 50.4 per cent. As evidenced by the contractors' registration database system, it is common in Malaysia for building contractors to hold both building and non-building licences, allowing them to engage in non-building work. Construction practitioners who

participated in this study majored in both building work (122 respondents, 48.8 per cent) and non-building works (128 respondents, 51.2 per cent), such as civil engineering, mechanical and electrical engineering, and facility management. The findings of this study were based on the perspectives of both managerial staffs (40 respondents, 16.0 per cent) made up of managing directors, directors, senior managers, managers, and assistant managers; and executive staffs (210 respondents, 84.0 per cent) made up of executives, engineers, quantity surveyors, and supervisors. Most construction practitioners (159 respondents, 63.6 per cent) had five or more years of experience, while others (91 respondents, 36.4 per cent) had less than five years of experience.

Table 2. Demographic Profile of Respondents

Category	Classification	Frequency	Percentage
Grade of contractor	CIDB G1	41	16.4
	CIDB G2	41	16.4
	CIDB G3	42	16.8
	CIDB G4	42	16.8
	CIDB G5	41	16.4
	CIDB G6	43	17.2
	Total	250	100.0
Category of work	Building	122	48.8
	Civil engineering	54	21.6
	Mechanical and electrical engineering	39	15.6
	Facility management	35	14.0
	Total	250	100.0
Position in the firm	Managing Director	1	.4
	Director	1	.4
	Senior Manager	2	.8
	Manager	26	10.4
	Assistant Manager	10	4.0
	Executive	21	8.4
	Engineer	54	21.6
	Quantity Surveyor	110	44.0
	Supervisor	25	10.0
Total	250	100.0	
Years of working experience	Less than 5 years	91	36.4
	5 years to 10 years	66	26.4
	10 years to 15 years	44	17.6
	15 years to 20 years	29	11.6
	20 years to 25 years	16	6.4
	25 years to 30 years	3	1.2
	30 years to 35 years	1	.4
Total	250	100.0	

Survival Strategies of Klang Valley Malaysian Small and Medium Building Contractors

Mean Ranking

Any mean score value less than 3.0 was deemed insignificant for the research because it fell below the neutral rating of 3.0. Simultaneously, standard deviation values less than 1.0 indicated that respondents were consistent in their agreement on the reported level of results. When two or more factors had similar mean scores, the one with the lowest standard deviation was given the highest importance ranking to properly rank the factors. Table 3 displays the mean ranking of the 18 survival strategies used by Klang Valley Malaysian small and medium building contractors in the post-COVID-19 era. According to the results of the mean ranking analysis, the top three significant survival strategies perceived by respondents in the post-COVID-19 era were: (SS02) effective financial management, (SS04) upgrading of the skills of employees for productivity improvement, and (SS07) improvement of service quality performance. On the contrary, (SS17) investment in various businesses, (SS14) purchase of resources, and (SS09) changing of geographical location were the bottom three significant survival strategies for Klang Valley Malaysian small and medium building contractors in the post-COVID-19 era.

Table 3. Mean Ranking of Survival Strategies

Ref	Survival Strategy	Mean	Std. Deviation	Rank
SS02	Effective financial management	4.23	.659	1
SS04	Upgrading of the skills of employees for productivity improvement	4.07	.604	2
SS07	Improvement of service quality performance	4.02	.688	3
SS12	Improvement of problem-solving capabilities	3.94	.638	4
SS06	Efficient marketing	3.80	.700	5
SS16	Effective networking to enhance reach	3.79	.731	6
SS05	Reduction in fees for services	3.78	.756	7
SS03	Diversification into related practices based on professional expertise	3.60	.812	8
SS18	Contract conflict risk mitigation by contract management	3.59	.702	9
SS13	Use of emerging technologies or innovations	3.56	.721	10
SS01	Diversification into other companies related to construction	3.56	.738	11
SS11	Improvement of corporate culture through activities that prioritise goals and responsibilities	3.55	.755	12
SS08	Layoff and reduction of employment	3.53	.729	13
SS15	Improvement of the organisational framework	3.50	.724	14
SS10	Cooperation partnerships	3.48	.756	15
SS17	Investment in various businesses	3.42	.708	16
SS14	Purchase of resources	3.35	.661	17
SS09	Changing of geographical location	3.01	.867	18

Result of FA

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were used to ensure the suitability of the research data prior to factor analysis using principal components analysis (PCA) with varimax rotation. The survey data for survival

strategies were appropriate for factor analysis, according to Table 4, because the KMO value was 0.914 (greater than the threshold value of 0.6) and the level of significance (p-value) of the Bartlett’s test of sphericity was < 0.001 (lesser than the threshold value of 0.05).

Table 4. Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett’s Test of Sphericity for Survival Strategies

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.914
Bartlett’s Test of Sphericity	Approx. Chi-Square	1676.515
	df	153
	Sig.	.000

Table 5 shows that with a factor loading of 0.40 as the cut-off point, three components with eigenvalues greater than one were extracted. Component 1 explained 37 per cent of variance, component 2 explained 9.3 per cent, and component 3 explained 6.8 per cent. The final PCA statistics and extracted components accounted for approximately 53.2 per cent of the total cumulative variance (greater than the threshold value of 50 per cent).

Table 5. Total Variance Explained for Survival Strategies

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	6.665	37.026	37.026
2	1.683	9.349	46.374
3	1.230	6.835	53.209

Discussion of Findings

Table 6. Rotated Component Matrix of Survival Strategies

Ref	Survival Strategy	Component		
		1	2	3
SS11	Improvement of corporate culture through activities that prioritise goals and responsibilities	.788		
SS17	Investment in various businesses	.756		
SS14	Purchase of resources	.696		
SS10	Cooperation partnerships	.694		
SS09	Changing of geographical location	.686		
SS13	Use of emerging technologies or innovations	.614		
SS15	Improvement of the organisational framework	.585	.481	
SS16	Effective networking to enhance reach	.563	.479	
SS01	Diversification into other companies related to construction	.557		
SS18	Contract conflict risk mitigation by contract management	.543	.419	
SS03	Diversification into related practices based on professional expertise	.540	.522	
SS06	Efficient marketing	.441		
SS04	Upgrading of the skills of employees for productivity improvement		.767	
SS07	Improvement of service quality performance		.753	
SS12	Improvement of problem-solving capabilities		.582	
SS02	Effective financial management		.504	
SS05	Reduction in fees for services			.803
SS08	Layoff and reduction of employment			.701

The factor loadings for each of the three components are shown in Table 6. After a thorough examination of the components' survival strategies, the subsequent interpretation was deduced to represent the underlying survival strategies. Component 1 (diversification, networking, and innovation strategies), component 2 (workforce management strategies), and component 3 (financial management strategies).

Diversification, Networking, and Innovation Strategies

The first component consisted of the following survival strategies: (SS11) improvement of corporate culture through activities that prioritise goals and responsibilities, (SS17) investment in various businesses, (SS14) purchase of resources, (SS10) cooperation partnerships, (SS09) changing of geographical location, (SS13) use of emerging technologies or innovations, (SS15) improvement of the organisational framework, (SS16) effective networking to enhance reach, (SS01) diversification into other companies related to construction, (SS18) contract conflict risk mitigation by contract management, (SS03) diversification into related practices based on professional expertise, and (SS06) efficient marketing as shown in Table 6. According to Table 5, it accounted for a variance of 37.026% (the highest among all the three components). It was named 'diversification, networking, and innovation strategies' after an examination of the characteristics of the survival strategies.

Belak (2016) observed that corporate culture was one of the factors that contributed to long-term firm success. Improved corporate culture was a key success factor in firms seeking potential partnerships to help with business diversification. Diversification-related strategies, according to Ogbu (2017), can aid a construction firm in mitigating the effects of an economic downturn. Building contractors could diversify their businesses by selling materials, leasing equipment, and expanding into areas where their competencies allow, according to Aghimien et al. (2018). Ling and Li (2016) discovered that a construction firm can achieve service diversification through a 'one-stop shop' approach, which allows the firm to offer a complete package of services to clients, including project management, construction, and maintenance. Investing in various businesses required relevant experience to evaluate and comprehend the new business opportunity. Nguyen (2019) discovered that investment is critical to the survival and growth of small businesses. Strategic resource procurement can help a company develop close relationships with suppliers, according to Sánchez-Rodríguez et al. (2019). Aghimien et al. (2018) realised that international construction firms prefer to use partnership as a survival strategy when entering new market areas. According to Viswanathan and Jha (2019), geographical location is an important factor for firms to consider when entering a new market because it can affect firm sustainability and profit growth. When making decisions to improve performance, it was critical for a company to use technology and innovation (Oly Ndubisi and Agarwal, 2014). Improvements to the organisational framework should make it easier to achieve goals, which are an important component of firm strategies. A network provides a critical opportunity for a company to identify critical stakeholders who can assist a company, particularly a small company, in gaining a competitive advantage in a challenging economy (Sharafizad and Brown, 2020). According to Treacy et al. (2016), building contractors must avoid potential conflict in ensuring firm survival during a recession period. Understanding the terms and clauses in a contract can help businesses avoid contract disputes. According to Ogbu (2017), many construction firms did not initially regard marketing as a critical survival strategy; however, some construction firms implemented marketing strategies and achieved

firm success. Contractors can benefit from effective marketing by promoting their services and attracting potential clients to hire them.

Workforce Management Strategies

The second component consisted of the following survival strategies: (SS04) upgrading of the skills of employees for productivity improvement, (SS07) improvement of service quality performance, (SS12) improvement of problem-solving capabilities, and (SS02) effective financial management as shown in Table 6. Workforce management practices have a direct impact on a firm in the long run. Table 5 shows that it accounted for a variance of 9.349% (the second highest among all the three components). It was named 'workforce management strategies' after an examination of the characteristics of the survival strategies.

According to Tabassi et al. (2012), improving a firm's human resources is a critical strategy for any construction-related organisation. Ogbu (2017) discovered a way for construction firms to survive in a difficult economy in the upgrading of employee skills for productivity improvement. This revealed that a company can survive by properly managing its workforce and training its employees to improve their capabilities. Service quality can be improved by fully understanding the needs of the clients and satisfying and exceeding their expectations (Pattanayak et al., 2017). Employees with a high level of problem-solving abilities were more likely to be able to manage a company successfully (Lee-Post, 2019). When the economy was shaky, many building contractors in Singapore implemented strict financial management to maintain their cash flow. Most construction companies delayed paying their employees and terminated employment (Teck Heng Lim et al., 2010).

Financial Management Strategies

The third component was made up of the following survival strategies: (SS05) reduction in fees for services and (SS08) layoff and reduction of employment as shown in Table 6. According to Table 5, it accounted for a variance of 6.835% (the lowest among all the three components). Following an examination of the characteristics of the survival strategies, it was named 'financial management strategies'.

Aghimien et al. (2018) discovered that lowering service charge fees can help a company retain old clients while also attracting new ones during a difficult economic period. Because the anticipated income would be reduced due to the implementation of the reduction in service fees, this survival strategy was appropriate when adequate measures were in place to manage the revenue and expenses that the firm was responsible for. Effective financial management of a company can assist the company in lessening the impact of a reduction in service fees. Layoffs and reductions in employment may be beneficial for businesses seeking to manage their available financial resources during a recessionary period. This is because layoffs and reductions in employment may be able to reduce the financial burden placed on the financial management of the businesses (Aghimien et al., 2018).

Perceived Success of Klang Valley Malaysian Small and Medium Building Contractors

Mean Ranking

Table 7 illustrates the perceived success of Klang Valley Malaysian small and medium-sized building contractors ranging from CIDB G1 to CIDB G6, as measured by organisational survival. All the small and medium-sized Klang Valley Malaysian building contractors who took part in this study considered that organisational survival resulted in firm (PS20) profit growth, followed by (PS19) business growth, and finally (PS21) employment growth.

Table 7. Mean Ranking of Perceived Success

Ref	Perceived Success	Mean	Std. Deviation	Rank
PS20	Profit growth	3.98	.515	1
PS19	Business growth	3.89	.597	2
PS21	Employment growth	3.67	.727	3

Result of FA

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were used to ensure the suitability of the research data prior to factor analysis using principal components analysis (PCA) with varimax rotation. The survey data for perceived success were appropriate for factor analysis, according to Table 8, because the KMO value was 0.673 (greater than the threshold value of 0.6) and the level of significance (p-value) of the Bartlett's test of sphericity was < 0.001 (lesser than the threshold value of 0.05).

Table 8. Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity for Perceived Success

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.673
Bartlett's Test of Sphericity	Approx. Chi-Square	133.468
	df	3
	Sig.	.000

Table 9 shows that with a factor loading of 0.40 as the cut-off point, only one component with an eigenvalue greater than one was extracted. This component explained 62.9 per cent of variance. The final PCA statistics and extracted component accounted for approximately 62.9 per cent of the total cumulative variance (greater than the threshold value of 50 per cent).

Table 9. Total Variance Explained for Perceived Success

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	1.886	62.880	62.880

Discussion of Findings

The factor loadings for the component are displayed in Table 10. Considering that all three of the initial three indicators of perceived success for small and medium-sized building contractors used in this study, as discovered through a review of the literature, were grouped together under this component, the name perceived success was retained for the component.

Table 10. Component Matrix of Perceived Success

Ref	Perceived Success	Component 1
PS21	Employment growth	.811
PS19	Business growth	.791
PS20	Profit growth	.777

Perceived Success

The component consisted of the following indicators resulting from organisational survival in this sequence based on factor loadings: (PS21) employment growth, (PS19) business growth, and (PS20) profit growth as shown in Table 10. According to Table 9, it accounted for a variance of 62.880%.

The success of a company can be measured in a variety of ways, including in terms of business, employment, profit, and resources (Hanifzadeh et al., 2018). Firm survival will lead to the achievement of firm success. Employment growth can assist a company in expanding its network, which can ultimately result in the success of the company (Torkkeli et al., 2016). Historically, the success of an organisation was linked to business growth (Hanifzadeh et al., 2018). Increasing returns on the efforts of businesses to produce goods and services is what profit growth is defined as (Sitorus and Christian, 2019).

CONCLUSION

Companies in the construction industry will face an uphill battle to remain viable in the post-COVID-19 environment if they do not put in place sound strategies. The recent COVID-19 pandemic has posed numerous new and long-term challenges to businesses across all sectors, particularly in the construction industry, and it is imperative that swift action be taken to prevent businesses from failing and to operate in a new business environment with new business models. The goal of this study was to improve firm survival chances by investigating the survival strategies and perceived success of Klang Valley Malaysian small and medium building contractors in the post-COVID-19 era.

The findings of this research suggested that diversification, networking, and innovation strategies, as well as workforce management strategies and financial management strategies, all contribute to the survival of organisations. These underlying dimensions corresponded to the domains of survival strategies used by small and medium-sized building contractors in Klang Valley, Malaysia, to combat the COVID-19 pandemic. Firm policies and strategies that encompass these areas should be developed and implemented so that businesses can prosper and succeed in terms of employment, business, and profit growth on an ongoing basis. Despite lower project profit margins due to the downturn in the economy, small and medium-sized building contractors must continue to build high-quality structures and provide high-quality services to remain competitive.

With the assistance of this study, small and medium-sized building contractors in Klang Valley, Malaysia, were able to adopt and implement effective and efficient survival strategies that allowed their businesses to survive and thrive while operating in the construction sector.

Construction practitioners and academics should be aware of the survival strategies that have been highlighted, and efforts should be made to discover additional useful survival strategies.

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