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## SUSTAINING COMPETITIVE ADVANTAGE DURING COVID-19 PANDEMIC: A PRELIMINARY CASE STUDY OF AEROSPACE MANUFACTURING INDUSTRY IN MALAYSIA

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Abstract:

The coronavirus (Covid-19) hits the world at a stage where companies plans are affected due to unplanned business disruptions and operations and the aerospace manufacturing industry is one of the industries that was hit severely. This paper is a preliminary attempt to investigate the impact of COVID-19 on the competitive advantage of one of the aerospace manufacturing companies as a case study. Through a comprehensive literature study and survey, this paper presents an interpretation of competitive advantage theory where the research framework presents the impact of internal and external influences on a company's competitive advantage and whether strategic management mediates the impact. It illustrates the general concepts and development of hypotheses using the internal and external influences and strategic management. Quantitative analysis using survey will be used to collect and analysis of data from 30 leaders and executives that have been chosen for this study using PLS SEM. It is expected that this study will present a guide that illustrates how theories, general concepts and processes can be managed, allowing strategic management personnel to understand their market position and, from there, identify where the future direction.

#### **Keywords:**

Competitive Advantages; Strategic Management; Internal Factors; External Factors, Aerospace Manufacturer



#### Introduction

A company's strategic purpose and a deep understanding of its principal strengths and assets reflect successful strategies. Successful businesses understand the needs and wants of their customers., their strengths and weaknesses of their rivals, and how they can generate value for their stakeholders. This approach intends to position a company for competitive advantage (Kluyver & Pearce, 2015). It results from executive decisions about what to provide, where to participate, and how to win to optimise long-term value.

The set of basic marketing principles that guide businesses in competitive markets defines marketing's role in leading and shaping strategic management (Hooley et al., 2018). It is creating a marketing plan to be implemented, including defining where the company will engage and how it will compete.

Aside from the requirement for strategy as a single, interdependent process, the fourth industrial revolution necessitates agility and coordination of internal and external environment changes (Wiraeus & Creelman, 2019). While keeping a strong emphasis on strategy and the client, an agile business can evolve, driving transformation change, and be versatile.

Strategic management is the management of businesses for long term survival to provide competitive advantage in the business that can bring above average profit and not the daily or ordinary business management (Aytar & Selamet, 2021). It enables firms to address the course of action in the future, identifying the action rules, tracking behaviour in time, and outlining the internal leadership of the company to set the organisation in the best competitive environment to achieve success. Business success necessitates a company's constant adaptation to its surroundings. Although it is not a guarantee of success, it enables organizations to make long-term decisions, put them into practice effectively, and initiate corrective steps as appropriate. Integration of intuition and analysis is essential for realistic strategic judgement.

#### Overview of Case Study: CTRM Aero Composite Sdn. Bhd.

CTRM Aero Composited Sdn. Bhd. (CTRM AC) is a manufacturer that fabricates composite components It specialises in fabricating composite components of aircraft applications, mainly on nacelle and wing components. The goal and commitment of CTRM ACs are to foster people, capabilities, and markets in Malaysia's advanced composites industry (CTRM, 2016). Due to airline cancellations and reduced global production, this national composite vendor has adjusted their manufacturing rates. CTRM AC supplies wing and engine cover panels to Airbus SE and Boeing Co. As a result, delayed or cancelled aircraft production affects CTRM AC. Boeing announced 60 cancellations of 737 Max orders in June, on top of the previous 47. At the same time, customers cancelled 355,737 Max orders in the first half of 2020. Airbus plans to eliminate 15,000 jobs over two years and reduce production by 40% (Aznam Shah, 2020). It is also hard to see the direct impact, like order cancellations. Pandemic COVID-19 had significant effects on the firm revenue generation and forecast. Before the pandemic happened, CTRM AC was forecasted to gain around 919 million for Financial Year 2020. However, the post-pandemic impact brings down the demand; thus, the adjusted revenue forecasted for Financial Year 2020 will only be around 531.4 million (CTRM, 2020). Overall revenue forecast declined by 42.2%, from 919 million to 531.4 million.



#### **Overview of Covid-19 Impact towards Aerospace Manufacturer**

The impact of COVID-19 discussed above lead to market restructuring and a significant reduction in interest in air travel. Airflight is vulnerable to oil shortages, force majeure, war, terror acts, global depressions, and outbreaks. In addition, demand severely weakened due to lower disposable income and behavioural changes (Suau et al., 2020). Previous outbreaks peak around one to three months and back to the earlier situation in the next seven months. There are two possible outcomes expected from this situation. In 2020, the 'Limited Spread' scenario predicted a \$63 billion loss in passenger revenues (11%), while the 'Extensive Spread' scenario predicted a \$113 billion loss in passenger revenues worldwide (19%) (Pearce, 2020). In addition, stock markets are now expecting a substantial drop in airline profits internationally, far beyond the influence of SARS.



Figure 1: World Passenger Traffic

(Source: ICAO,2020)

The International Civil Aviation Organisation (ICAO) reported a 60% reduction in airline passengers (both regional and international) in 2020 compared to 2019, with a total decrease of 1,376 million passengers, or 74%. Loss of \$250 billion in gross operating income for airlines due to lower passenger numbers (Air Transport Bureau, 2020). According to the Airports Council International (ACI), 40% of traffic passengers and 50% of the terminal income by 2020 could wipe out due to COVID-19. (Airports Council International, 2020).

The plane observation range is densest over Europe and Northern America, subsequently followed by East Asia and Australia (James et al., 2020). 665 airports had at minimum one daily climb, 400 from European or Northern American terminals in late November 2019. However, flight cancellations due to the pandemic reduced aircraft observations by 80% by late April 2020.





**Figure 2: March 2019 Vs. 2020 on Global ABO Coverage Observation** (Source: James et al.,2020)

Global COVID-19 flight reductions are shown in Figure 2. Information coverage amid March 2019 and 2020 resulted in reduced air traffic worldwide. However, several flight routes and terminals have had coverage increased (James et al., 2020). The most affected industry is related to the airline industry (Haydon & Kumar, 2021). Commercial traffic fell 42.4% in October 2020, and traffic was 43% below 2019 levels in September and August, an insignificant gain (-45.2%). In contrast, traffic fell 1.67% from September to October 2020. Commercial traffic was depressed 73.7% in April 2020) (Petchenik, 2020).

Far ahead, reducing air transport demand will have impact on the aircraft manufacturer. Following the COVID-19 crisis, Boeing lifted the lid for the very first time in the early twentieth century, revealing a substantial decrease for the coming decade. In 2020-2029, it anticipated 18,350 deliveries, declining 10.7% from an informal prediction of 20,550 (Johnson & Hepher,2020). According to the 2020 BMO (Boeing Market Outlook), revenue for 18,350 passenger airliners will be 11% lesser in the next decade than the corresponding 2019 prediction of \$US2.9 trillion (Airline Ratings, 2020). As a result, Boeing will decrease its 2020 passenger aircraft sales volumes, as reported by S&P Global Market Intelligence. In addition, major airlines postpone new jet orders and delivery dates corresponding to reducing passengers spurred by the COVID-19 pandemic. According to a statement, Boeing said it might reduce aircraft production rates for 787 models to 10 units from 14 units per month in 2020, with an additional reduction to 7 units per month by 2022 (Lazzaro, 2020). In the first quarter, the 787 models accounted for 58% of Boeing's overall demand.

According to Oestergaard (2020), Airbus has slashed output on several programs and aims to keep the primary plane yield at 40% below levels before the pandemic for the next two years. Boeing reduced the production capacity of 787 jet models from 14 to 10 per month in 2020 and a further drop to 7 aircraft in 2022 (Lazzaro,2020). As a result of the COVID-19, another aircraft OEM, Airbus, will reduce output across its entire manufacturing line. According to Garcia, 2020, Airbus is cutting main aircraft models by a third to combat the COVID-19. 40 A320s will be built per month, down from 6. A330s will be produced at a rate of two per month instead of six. Likewise, A350 production will drop to six per month from ten aircraft sets. *Copyright* © *GLOBAL ACADEMIC EXCELLENCE (M) SDN BHD - All rights reserved* 



COVID-19 spread has substantial waves on global production and supply chain networks. Manufacturing facilities have closed or reduced capacity, and the raw and finished product supply chains are disrupted by trading and transportation issues. This pandemic has a major influence on reintegrating industrial workers. It reduced human resources, lowering manufacturing process efficiency. Proper safety measures are required to consider social distance in the workplace and implement frequent health monitoring for employees to enhance the human aspect of production. Supply chain disruptions included (a) decreased demand for goods (automobiles, public transportation, and textiles), (b) decreased demand for services (temperature scanners, ventilation systems, face masks, disinfectants, protective clothing, and essential food products), and (c) distribution failures and unpredictability in raw materials, (d) Reducing the ability to deliver and obtain goods on time inadequate supply and transportation constraints; and (e) Assure employees capability to construct and transport goods (Kumar et al., 2020). The pandemic virus affects all industries, particularly aviation, passenger and cargo airlines, airline food caterers, airport authorities, aircraft parts manufacturers, travel agents, and MROs (Rahman et al., 2020). The virus's spread has varying effects on the aviation industry. The virus reduced airline capacity by nearly 50%. It is happening in nearly every country.

Despite the background and list of critical factors that could influence aerospace manufacturer demand reduction, it also represents a general insight into national aerospace composite manufacturers currently struggling due to demand reduction from the COVID-19 outbreak impacts. The delivery demand is pushed out to the right and with an increase of concern on ordering cancellation due to airline bankruptcy (Lazzaro, 2020); (Oestergaard,2020). This outbreak badly affects aircraft manufacturer's revenue and faces high inventory levels. Nevertheless, the manufacturer obliges to manage in-transit material, ordering material with a long lead-time, and several government commendations and requirements that affect different global manufacturing production flow to remain resilient in market share.

#### Impact of COVID-19 on The Aviation Market Players.

Investigation on the impact of COVID-19 on aviation such as airlines, airport authorities, air cargo providers, in-flight food caterers, aircraft manufacturers, maintenance, repair, and overhaul organisation were done and it was recommended that empirical research on COVID-19 and its impact on the aviation business should be carried out (Rahman et al., 2020). Due to COVID-19, research can focus on business improvement initiatives and current strategies to improve the performance of aviation organisations. Each aeronautical business can explore micro, macro, and meso factors to define key measurements. They also recommend future research on the relationship between foreign and local regulators to identify the best business practices for aviation players

While Thorbecke (2020) used sectoral stock price responses to study the COVID-19 crisis' impact on the US economy, affected industries include funerals and airlines. Massive areas of the economy whose recovery is dependent on pandemic control rather than macroeconomic conditions. It will be interesting to see how other countries' stocks have responded and how industrial structures, development levels, and macroeconomic policy responses differ across countries.

Mhalla (2020) examined the COVID-19 consequences on the worldwide economy, focusing on oil and air travel. The long-term effects of the coronavirus are still unknown, but demand is expected to remain weak as the epidemic spreads to other major regional economies. In



addition, due to the new coronavirus epidemic, many European airlines are reducing flight schedules and cutting costs. As a result, the major airlines will have to decide whether to ground planes or redeploy them.

Liptakova et al., (2020) believed that recovering from the current aviation crisis will require economic recovery and regaining public confidence. Nobody knows how long this will go on. Travel volumes will not resume for 3 to 5 years, according to IATA. However, the present predicament may purge the manufacturing in multiple approaches, such as eliminating weak airlines, as recent airline bankruptcies have shown.

### **Responsive Towards Firm Resilient**

Xu et al. (2020) investigate the global supply chain's efficiency and reaction and propose a set of managerial strategies to reduce threats and improve agility in different manufacturing segments. An article discusses the implications of COVID-19's lengthier period, marketplace, and scope. The COVID-19 pandemic has reportedly disrupted major global supply chains in pharmaceuticals, food, electronics, and the automotive industries. Temporary closures of industries and shops, travel restrictions, and compulsory quarantine of citizens were used to stop the spread of COVID-19. Shortages of human resources, active ingredients, and raw materials resulted. Tightening controls exacerbated the issue. Delays and inventory shortages result in global supply chains, making two long-term competitiveness enablers recommendations. Understanding critical vulnerabilities and monitoring disruptive risks in real-time is the first. The subsequent endorsement collaborates with internal stakeholders and strategic and critical suppliers to develop risk management strategies.

Aviation is currently focused on short endurance. An expectation of this "new normal" in this way must happen now, to consider change over the next six to two years. The aerospace industry is seeing widespread requests for crisis state assistance and, more importantly, legislative intervention. Deregulation in aviation must be adequately managed to avoid twisted rivalry (Singh, 2020).

According to Hader (2020), firms and governments must thoroughly ensure the critical industrial skills are occupied to avoid driving the entire sector at risk. As a result, the industry must quickly agree on the "new normal" manufacturing rates, develop a mutual strategy for transforming the sector to the "new normal", recognise and support vulnerable components in the transition process.

Various industries have evolved immensely. The need to propagate massive R&D investments across many markets drove the globalisation of the aircraft manufacturing industry. Monitoring globalisation is an essential strategic management undertaking. Even more important is knowing how to use that data to gain an advantage. The ability to gain and hold a competitive advantage is critical to long-term success. A company's competitive advantage typically lasts only a short time due to competitor copying and weakening.

Typically, COVID-19 focused on the perspective of tourism, medical science, and airlines services (Suau-sanchez et al., 2020; Rahman et al., 2020; Mhalla, 2020; Sun et al., 2020; Iacus, 2020). In contrast, a clear industrial organisation perspective of COVID-19 is inattentive. Only some researchers, emphasised COVID-19 impact on aerospace, which conducts investigations to determine various methodologies embraced to determine the market impact and showcase



the aerospace industry's development rate and downturn patterns because of the COVID-19 pandemic (Singh, 2020). So far, limited study has worked on the implementation to overcome the lingering COVID-19 effects, specifically on aerospace manufacturers in Malaysia and how the related firm reacts to sustain its competitive advantages and remain resilient.

#### **Literature Review**

#### Competitive Advantages

Corporate competition is inevitable. To compete, one must constantly distinguish, understand the market, consumer needs, and their variations. It is essential to consider and control a wide range of resources (Kuncoro & Suriani, 2017). Competitive advantages occur when companies outperform rivals economically. Financial value is the difference between a consumer's perceived benefits and the total cost of the goods or services (Barney & Hesterly, 2018). The study of heterogeneous firm features necessitated various methods to identify, measure, and comprehend firm resources and capabilities. In the resource-based approach, supporters argue that each firm has unique resources and skills to maintain competitive advantages (Dagnino & Cinici, 2016). Each theory relies on observations and predictions about how competition in this industry will evolve to gain a competitive advantage. The more accurately these theories and statements reflect current competitiveness in this sector, the more likely it will achieve a strategic edge by applying its strategies. If these conclusions and theories are incorrect, a firm's tactics are unlikely to provide a competitive advantage. Difficulty in predicting market competition, determining a company's strategy is challenging.

The five reasons that propel strong growth companies are human capital, human resource management, strategy, skills, and creativity (Demir et al., 2016). Competitiveness measure by past success or future competitiveness. Examples are financial performance (profit, earnings growth, returns on investment), non-financial performance (customer retention, employee growth), benchmarking balanced scorecard, metrics like earnings, pricing, productivity, and market share were used (Sacitra, 2016). A competitive advantage allows a company to outperform its competitors. Thus, profitability is a key indicator for assessing competition, and turnover is a key profit margin. However, efficiency, market share, and profitability are insufficient to determine firm-level competitive advantage.

Competitive advantage is assessed by comparing the results of strategic attempts to firm profitability or market share stabilisation. Although competition appears to revert corporate performance to the mean, long-term competitive advantages ensure great returns (Mauri, 2016). A company's financial stability allows it to make prudent financial decisions and maintain or reduce market competition. According to Kliestik et al., (2020), interim financial stability reduces future financial threats. A company's overall financial strength is determined by the ratios listed above and other factors such as its size, industry, and location. Profits and losses are the most critical indicators of a firm's performance, especially compared to other manufacturing representatives. The results show that the liquidity ratios that measure a firm's ability to repay short-term debt obligations are crucial. The current ratio measures a company's ability to pay short-term obligations using current assets. A higher current ratio is better than a lower current ratio because it shows the firm pays a current debt. In the following period, short-term liabilities are outstanding. The liabilities to total assets ratio measures the number of assets hidden by liabilities. The ratio of liabilities to total assets is high, indicating low stockholder equity and potential creditworthiness issues. Liabilities-to-total-assets ratios are



high in distressed firms. Then there are the total sales to total assets ratio, which measures corporate efficiency by comparing assets to revenue. The higher the ratio, the healthier the firm. Finally, the equity-to-asset ratio regulates a firm's financial leverage. A higher equity-to-asset ratio is required to convince creditors that a firm is sustainable and low-risk.

Long-term success requires gaining and maintaining a competitive advantage. A company's competitive advantage typically lasts only a short time due to competitor copying and weakening. So, gaining a competitive advantage is not enough. Assemble, implement, and evaluate plans that capitalise on external and internal variables to achieve long-term competitive advantage. Different industries go global for various reasons. The need to propagate R&D investments across many markets drove the globalisation of the aircraft manufacturing industry (David & David, 2017). Monitoring industry globalisation is a strategic management task. Even more crucial knows how to use that data to acquire or optimise advantages.

A wide range of methods for assessing an enterprise's competitiveness and market position are being investigated, such as PEST analysis, McKinsey, Model Boston Consultative Group, GAP analysis, Michael Porter, situational analysis (SWOT analysis), expert assessment method, financial and economic method, and others (Khanenko, 2019).

Companies that can maintain a competitive advantage provide sustained benefits. They help a company's reputation by associating it with a long-lasting, appealing offer. A company can create a competitive advantage by combining a temporary competitive advantage (TCA) and a sustainable competitive advantage (SCA). This benefit adapts to changes in the company's background. Another management implication is that combining SCA, and TCA does not guarantee a competitive advantage. By combining its strengths, the company can seize new opportunities while maintaining its core business. This method necessitates the establishment of fundamental assumptions (Soloducho-Pelc & Sulich, 2020). Following these principles increases the likelihood of achieving outstanding short- and long-term results. Having an SCA and TCA focused not only on economic values but also on social and environmental issues may be reasonable.

Nobody has unlimited resources, and they must assess the company's value of various options. An organisation's long-term strategy decisions bind it to specific goods and markets. To win in the long run, strategists can help decision-makers predict significant events that could impact the company. To make assumptions, one needs to know what is coming up in the company's business. Strategists must adjust if actual events differ significantly from forecasts. No policy can be made without rational expectations. Accurate assumptions are a competitive advantage for well-informed firms (David & David, 2017). Only after competitors attempted to copy a firm's strategy have stalled or failed can a firm claim one or more critical strategic benefits. Also, no competitive advantage is permanent. How a competitor's responsiveness to obtain the abilities to imitate a company's value-creating strategy defines the duration a competitive advantage can last (Hitt et al., 2017).

Barney and Hesterly (2018) concluded that the best way for a firm to choose its strategy is to follow strategic management principles. The strategic management framework is a set of evaluations and decisions that will help the firm find a competitive advantage. The strategic management method of a series collection of analyses and choices will improve the probability



of a company selecting a successful approach that produces competitive advantages, as shown in figure 3 below.



**Figure 3: Strategic Management Process** 

(Source: Barney & Hesterly,2018)

Gurel and Tat (2017) suggested that the external and internal forces' assessment is one core element in strategic management. An external review should help the company identify key competitive risks and opportunities. It also points out that the world of competition is changing, posing new challenges and opportunities for businesses. An internal review identifies a company's strengths and weaknesses. It also shows a company's strengths and resources as sources of competitive advantage rather than gains.

### Scanning Internal and External Influence

Many firms' success or failure is determined by the factors that influence their operations. Scanning the internal and external environments is critical for business planning and organisational analysis (Amuna et al., 2017). It is vital to both for-profit and charitable companies' business practices. However, it is challenging to plan excellent strategy management without considering environmental influences.

According to Rahman et al. (2020), to remain competitive, the company should carefully evaluate its external and internal factors. The approach is linking a company to its environment, both internal and external. Complex political, social, economic, technological, and cultural changes are now the norm. In a complex environment, an entity that is not responsive cannot survive. An environmental scan is a method of analysing the climate that is dependent on several variables. External factors include political, economic, scientific, technological factors. The internal environment includes resources, capability, culture, management style, and structure. This study's independent variable is a latent variable, environment factor that influences business landscape. A competitive market will derive from PEST (Political, Economic, Social, and Technology) and SWOT analysis to assess CTRM AC key external and internal factors.



**Figure 4: Correlation between SWOT and PEST towards Internal and External Factors** (Source: Author)

### Research Framework and Hypotheses Development

The proposed research framework for this study derived from the Competitive advantage theory and the PEST and Swot theories as shown in Figure 5 below:



**Figure 5: Proposed Research Framework** 

### Relationship between Internal Influence and Competitive Advantages

Internal analysis is a third aspect of the strategic planning process that describes the successes besides limitations. Recognising the magnitude and nature of a business's tools and expertise



and structure, particular talents, and company-specific or distinctive capabilities are addressed when investigating the origins of successful adviewing (Hitt et al., 2017). Build and maintain a competitive advantage entails a business attaining superior performance, consistency, creativity, and responsiveness for its consumers. The company's strength contributes to outstanding performance, while its limitations interpret as unsatisfactory performance. The internal analysis supports a firm in identifying its strengths and weaknesses (Soloducho-Pele & Sulich, 2020). It also assistances in understanding that its resources and capabilities are likely to be competitively advantageous and less likely to be the source of such advantages. Hence, the first hypothesis is proposed to examine the relationship of internal factors to competitive advantage.

# H<sub>1</sub>: Internal factors possess a direct positive influence on competitive advantages

#### Relationship between External Influence and Competitive Advantages

External analysis is a second aspect of the strategic management phase in studying the firms' exterior operational climate. External evaluation's primary goal is to recognise strategic prospects and risks in the firms' operating atmosphere that could influence how it pursues its task. The firm recognises critical threats and opportunities in its competitive environment by conducting an external analysis (Soloducho-Pele & Sulich, 2020). It scrutinises how the rivalry is likely to develop in this environment and its consequences for a firm's threats and opportunities. The second hypothesis proposed would enhance the understanding of the relationship between external factors and competitive advantage.

# H<sub>2</sub>: External factors possess a direct positive influence on competitive advantages

#### Relationship between Strategic Management and Competitive Advantages

The strategic management method is a sequential collection of analyses and choices which improve the probability of a company selecting a successful approach to produces competitive advantages (Barney & Hesterly, 2018). The approaches define a company's productivity in meeting customer needs, and executives are heavily responsible. High-level skills are required to protect and grow future corporate strengths. Top management is in charge of allocating staff and financial resources. These findings often determine the fate of entire industries and businesses. Strategic Management enables companies to add value, build, discover, improve, and conquer their competitive position by demonstrating the necessary actions. Organisations can use strategies to determine future addresses or treatment plans, actions to be taken, timetables, and internal leadership to position themselves for growth (Amuna et al., 2017). They define how efficiently a company meets customer needs, and executives are heavily liable. High-level skills are required to ensure long-term corporate strength preservation and expansion. Management makes essential decisions about staffing and budgeting. Strategic Management enables businesses to add value, build, discover, improve, and conquer their competitive position by demonstrating the necessary actions (Guerras-Martin et al., 2014) To investigate this, a third hypothesis is proposed to examine the relationship between strategic management and competitive advantage.



## H<sub>3</sub>: Strategic Management possesses a direct positive influence on competitive advantages

# Relationship between Environment Factor, Strategic Management and Competitive Advantages

According to Borger and Gaia (2010), strategic management is a cognitive science that intersects with sociology, economics, psychology, finance, and marketing. The current state of the field can present a complex picture of numerous approaches and paradigms. As a result, there is no conclusive general theory that encompasses strategic management. In strategic management, decisions are made. Strategic decisions are those that determine a company's strategic direction. Their mission is to ensure the company's long-term success, which includes: (a) recognising and understanding path dependencies, (b) responding to current change dynamics, and (c) implementing strategic programs on the previous two points' foundations. Each resolution's action will define future growth. It includes (a) external and internal climate appraisal, (b) strategy formulation (focus on the long-term planning), and (c) strategy implementation (Strategic management focuses on managing and accessing potential threats and opportunities while taking into account a company's strengths and weaknesses). Companies must constantly update their organisation and search for new strategic goals and execution approaches to keep up with the changing climate (Sigalas et al., 2013). The global market's ability to sustain competitive resources may be another competitive factor. Global affiliates or strategic alliances should learn these techniques. Concepts and ideas, especially international coalition methodologies, continue to shape market competition. The final hypothesis which uses strategic management as a mediator is hence proposed to examine if it mediates the relationship between environmental factors and competitive advantage.

#### H4: Strategic Management mediates the relationship between environmental factors and competitive advantages

### Methodology

#### **Research Method**

For examining the hypotheses, this study proposed to utilise a quantitative approach using results from survey and literatures to discuss the research topic and to determine the mediation effect of strategic management on the relationship between environmental influence and competitive advantages.

a) The questionnaires for the survey will be adapted from modified from the previous study by Borges and Gaia (2010) and Bismark et al. (2018). Five Likert-point scales will be used to measure and evaluate response. The environment influences are the exogenous latent variable, while competitive advantages represent the endogenous latent variable and strategic management is the mediating latent variable in this study. The survey will be distributed online amongst 30 personnel directly involved with strategic management activities.



b) Literature:

Information will be extracted and analyzed from media and relevant websites as well as company reports, archives, and presentations to better comprehend the situations surrounds the company as a case study.

#### Data Analysis Method

Data collection emphasis the competitive environment factors inquiry will be collected. This study proposed to use PLS-SEM to investigate the causal relationship between the variables and the mediator. SmartPLS statistical software employs hypothesis testing to investigate the causal and effect relationship between independent and dependent variables in theory (Hair et al, 2018). PLS-SEM outperforms traditional SPSS; flexible sample does not require normality assumptions and provides solutions with small sample sizes due to a small population (Avkiran & Ringle, 2018).

#### Conclusion

This study proposed the research framework to examine the relationship between the internal, external factors and strategic management and competitive advantage and to examine if strategic management itself mediates the main factors and competitive advantage. The study focuses on the environment's influence and lingering effects of the uncertainties from the COVID-19 pandemic to market share, disregarding other associate factors such as bailout, policy changes, and government austerity drive. To verify, a quantitative approach is recommended. It is expected that through a comprehensive literature study, this study using the company as a case study will present a guide that illustrates how general concepts and processes can be done, allowing strategic management personnel to understand their market position and, from there, identify where the future direction. Strategic Management enables businesses to provide value, build, discover, strengthen, and maintain competitive advantages by specifying what measures to achieve this position. It enables firms to stand out the addresses or course of action in the future, identifying the action rules, tracking behaviour in time, and outlining the company's internal leadership to set the organisation in the best competitive environment to achieve success.

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