

# The Influence of Strategic Agility on Organizational Performance during Pandemic: A Perspective of SMEs in Manufacturing Sector

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## ABSTRACT

This research aimed to express the importance of strategic agility on organizational performance during the pandemic era, which demands organizations to strategically respond promptly to the uncertain and unexpected changes in the business environment. As many as 149 responses from a cross-sectional survey among SMEs in the manufacturing sector in Malaysia were then analyzed by using SPSS version 24 and PLS-SEM. The results reveal that strategic agility significantly influences organizational performance. The dimension of strategic agility and research conceptual framework was chosen and formulated based on the Dynamic Capability Theory. The empirical analysis and conceptual framework generate some important contributions to academicians, practitioners, and policy-makers in the strategic-agility area to support the organizational performance of SMEs in the manufacturing sector during a pandemic.

**Keywords:** *Dynamic Capability Theory (DCT), Strategic Agility, Organizational Performance, Pandemic, Small and Medium Enterprises (SMEs)*

## 1. INTRODUCTION

The pandemic of Covid-19 has afflicted us with many unforeseen global phenomena. The impact of this crisis in the most affected countries has thrown the country's economy into chaos and effectively put commerce at a standstill. It has affected most businesses towards uncertainty and confusion about threats and opportunities. The pandemic has so far brought immediate disruptions in economic activities that have affected all sectors especially the Small and Medium Enterprises (SMEs). During a pandemic of this scale, SMEs worldwide have been facing a decline in business growth, sales, and revenue. Since SMEs have a significant role in the progress of the country, the impact of the pandemic has imbalanced the growth of the economy around the world. The effect of pandemic uncertainty in the business landscape forces the organizations to actively sense every opportunity and threat to sustain or capitalize on the opportunities to become a leader in the space they are competing in. Disruptive customer consumptions and buying patterns during pandemics have led organizations to adapt quickly by revising their business approach. Strategic agility becomes essential for an organization to proactively respond to risk and market opportunities when the business environment changes. Strategic agility is defined as an organization ability in sensing changes, timely decisions to adapt by right actions during the dynamism of the business environment

[1]. A study by Suroso et al. [2] suggested that an organization that has strategic agility in sensing environments and implement promptly decision making will eventually determine its future. One of the more significant findings in SMEs is the lack of resilience during a pandemic, due to the lack of strategic agility [3]. Mamun [4] found that manufacturing SMEs in Malaysia lack strategic-agility awareness. Therefore, it's crucial to analyze the influence of strategic agility on SME performance in the manufacturing sector in Malaysia. Further research on this will assist more conclusive evidence about the impact of strategic agility on the competitive advantage and performance of an organization. Continued observations will be able to guide business leaders to comprehend the significance of agility in organizational performance. This research will further enhance the empirical evidence in the relationship between strategic agility towards organizational performance among manufacturing SMEs in Malaysia.

## 2. LITERATURE REVIEW

### 2.1. Organizational Performance

Studies on organizational performance have become prevalent researches among academicians and

practitioners. In management research, organizational performance is one of the most significant variables being identified. As a result, a substantial amount of research has been investigated and published on organizational performance especially in dealing with the uncertain business environment [1] and [5]. Even though the organizational performance concepts are well sought, the scholars still have yet to adequately master the art to deal with the uncertainty dynamism of the business landscape satisfactorily. A large number of concepts continue to be investigated to explain organizational performance due to the lack of consensus among scholars on the performance definitions and objectives of an organization. The research conducted by Rehman et al. [6], found that organizational performance is about how the organization successfully realize the objectives and targets set by stakeholders. Most of the literature on organizational performance studies were focused mainly on financial measurements to reflect the organizational performance. Nevertheless, some of these indicators might not be relevant in the digital age. In this age, the measurement based only on financial indicators for business performance is not necessarily inclusive. Many researchers have argued that more studies are still needed for a better understanding of measuring organization performance besides using financial measurements. This is supported by Dobrovic et al. [7] study, which revealed that non-financial performance measurement is also able to assess organizational performance. The results of the same study also suggest that the indicators of non-financial performance can be accepted in manufacturing companies. Important conclusions that can be drawn is that a newly established measurement of non-financial performance can complete the picture. These may navigate toward new methods of assessments or recommendations to business processes to improve performance. By anticipating and sustaining long-term survival, SMEs need to be flexible to adapt to new challenges created in the post-crisis era. For SMEs organizations, to be able to perform and survive in the long term is determined by their agility, adaptation, and response speed. As shown above, the concept of organization performance still has challenges on consensus on the unanimous acceptance on the definition. Therefore, this research on strategic agility relationship with organizational performance among manufacturing SMEs in Malaysia is timely, since this research is still fragmented in nature towards crisis readiness.

## **2.2. Strategic Agility**

The business environment has been continuously undergoing intense transformation due to technological disruptions, trade-war policies, that impact the globalization trend with nationalism, and also changes in customer-spending behaviours during the pandemic. Therefore, to sustain and capitalize on the opportunities or to mitigate any risks in any organization, resilient strategic agility models are needed for better sustainability [8]. In short, strategic agility is the capability of an organization to respond and act rapidly to the dynamism of business-

landscape changes. The flexibility of an organization to access and redeploy its resources promptly to business environment changes reflects the strategic agility of such an organization. In other words, strategic agility enables an organization to self-align its operation with the right strategic focus and response based on its business environment expectations [9]. An organization with strategic agility ability will be able to demonstrate better resilience and enable to create new opportunities and able to mitigate the risk from their quick-sensing and fast implementations on the decision made. The observations are consistent with the finding by Arokodare and Asikhia [10], which suggested that strategic agility is related to an organization that can anticipate and predict risk and opportunities from new endeavours in the environment. The study further elaborated that it is the organization capability to recognize and the ability to respond to threats and opportunities in a timely fashion. Timely reflection of awareness, decision making, and implementation is the trademark of strategic agility [11]. Research finding by Tende and Ekanem [12] study also points that strategic agility is about the capability of anticipating and forecasting trends in the business landscape with appropriate timely measures. They further added that the survival of any organization does not longer rely on financial resources alone, but also on the strategic agility to respond quickly to environmental changes. In another study, namely Akhigbe and Onuoha [13] which suggested that it is not the resilient organization that survive longer, but an organization with high flexibility to adapt, will be the one that can stay relevant for long. Hence, strategic agility is vital for organizations in the current business crisis, especially during the pandemic that invariably causes a high level of uncertainties and interruptions [14].

## **2.3. Research Hypotheses**

### **2.3.1. Strategic Agility and Firm Performance**

Strategic agility is crucial for the survival and sustainability of any organization that operates in an uncertain and ambiguous environment. Many researchers have argued that the flexible capability in aligning to technology disruption and deploying strategy promptly, affects positively an organization's performance [1] [10]. Strategic agility enables an organization's ability to efficiently regulate and also execute the right strategic direction at the right time to enhance overall organizational performance. The performance of an organization depends on its strategic agility aligning flexibility towards its stakeholders such as competitors, customers, suppliers, partners, and government's policies [15]. Literature reviews on organizational performance have indicated that strategic agility has improved the competitive advantage and overall performance of any organization significantly [16]. In addition, Gerald et al. [11] found that strategic agility affects the anticipated impact on SMEs performance. In the context of Malaysian studies, it found similar results as

obtained by Chan and Muthuveloo [17], that strategic agility indeed influences the Malaysian SMEs performance. In contrast, the study did not discuss in detail these strategic practices from sensing to execution that affects the organizational performance of Malaysian SMEs in the manufacturing sector. The author also showed a similar result, that Malaysian MSMEs tendency to face challenges to decide crisis due to the lack of agility in management competencies [8]. In Malaysia, the findings are still not conclusive yet, even though the strategic agility studies have indicated a close relationship with the organizational performance of SMEs in the manufacturing sector. Therefore, further investigation of strategic agility influence on organizational performance of SMEs in the manufacturing sector in Malaysia is surely needed, especially during this pandemic era. Hence, the hypothesis could be developed as follow:

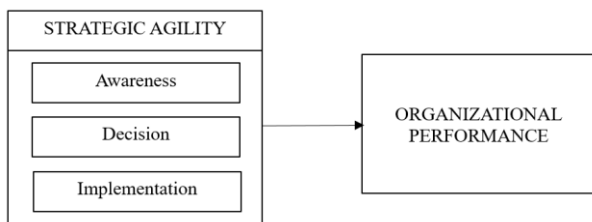
H<sub>1</sub>: Strategic Agility positively and significantly influences organizational performance among SMEs in the manufacturing sector in Malaysia.

**2.3.2. The Underpinning Theory**

When organizations are running in a dynamic business landscape at present, the Dynamic Capability Theory (DCT) can explain how an organization could sense and adapt to uncertain business-landscape to survive economic challenges and enhance its performance [18]. DCT can also create a better approach in explaining the dynamic and unpredictable landscape during the digital age. This model has involved the capabilities in sensing the trends of the external-market environment with outright environmental scanning [16] and [19]. Therefore, this research will be seen through the lens of DCT to fill the research gap by generating a different point of view on organizational performance and strategic agility. As the consequences, empirical findings generated from this research may give further enlightenment on how SMEs need to have fluidity in the agility in sensing, deciding, and executing actions during the dynamic market-environment changes to possess a competitive edge.

**2.3.3. The Development of Research Conceptual Framework**

The Dynamic Capability Theory (DCT) serves as an underpinning model and theory, which was adopted to develop the conceptual framework of this research as shown in Figure 1 under the dynamism of post-pandemic.



**Figure 1** Conceptual Framework

Based on the theoretical and conceptual frameworks conducted by Palanisamy et al. [20], this research helps enhance the importance of strategic agility on organizational performance further. Three strategic agility dimensions based on sensing, decision, and implementation positively and significantly influence organizational performance among SMEs in the manufacturing sector in Malaysia during the pandemic era.

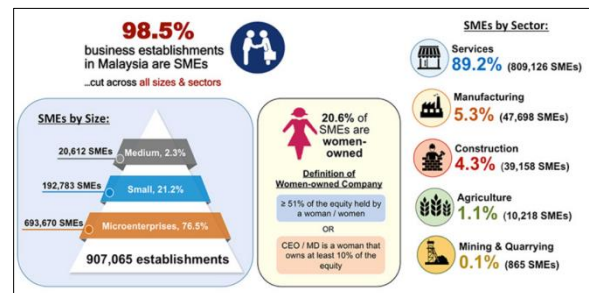
**3. METHODOLOGY**

**3.1. Research Design**

The main objective of this research was to examine the relationship among the different key variables observed in the context of strategic agility and organizational performance among SMEs in the manufacturing sector in Malaysia through correlational research. To guarantee the minimum interference from the researchers, the survey was performed within a flexible research setting, whereas the researched variables were observed generally at the respondent's convenient environment. Moreover, this cross-sectional research was based on a single period between November and December 2020 during the pandemic for data collection purposes, to answer the formulated research questions. In the end, this research design best fits the constraints in forms of costs, time, and movement restriction in organizations during the pandemic, when conducting this research.

**3.2. Sampling Technique and Data Collection Method**

This research applied a purposive sampling method because of its practicality and swiftness as data collection was performed during the Covid-19 pandemic due to the movement restriction and distancing regulation. This research focused on manufacturing SMEs in Malaysia as displayed in Figure 2.



**Figure 2** The SME Landscape in Malaysia - Economic Census 2016, Department of Statistics Malaysia (DOSM)

A quantitative research method was applied in this research and the data was gathered using online questionnaire

distribution. The questionnaire used a 5-point Likert Scale. SmartPLS-SEM version 3.2.7 was utilized for PLS data analysis purposes for hypotheses testing, while the SPSS Version 24.0 was utilized for descriptive statistical analysis. This research was based on the strategic agility among SMEs in the manufacturing sector in Malaysia, in which the organization became the analysis unit. The type of organization under observation are textiles & wearing apparel, printing and reproduction of recorded media, rubber & plastics products, wood and products of wood and cork (except furniture), manufacturer of articles of straw and plaiting materials, food & beverages products, machinery & equipment incl. repair & installation, furniture, computer, electronics and optical products, and electronic equipment. The target of respondents in this research is the organization representatives involved in the matters of strategies planning and execution such as the top management, senior management and the senior executive's team of manufacturing SMEs in Malaysia. This survey didn't include the large local companies (LLC) and micro-enterprises due to the size of employees as well as financial capability.

#### 4. RESULTS AND DISCUSSIONS

A self-administered online questionnaire link was sent via e-mail to 510 respondents working in SMEs in the manufacturing sector in Malaysia. The respondents participated on a completely voluntary basis. Data collection was done using the convenience-sampling method from November to December 2020. At the end of the survey period, as many as 149 responses were acquired, which indicates a 29.2 % response rate.

In this research, the reflective measurement model assessment is displayed in Figure 3 as follow:

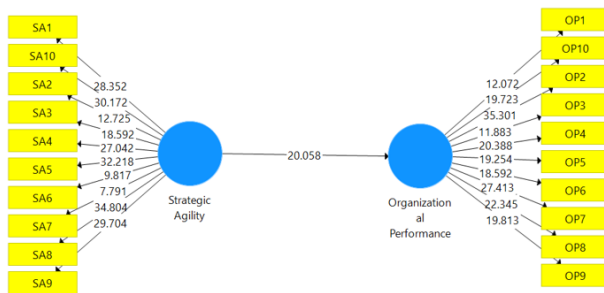


Figure 3 Statistically-Significant Path-Coefficients

The measurement model confirms the validity and reliability of the measurement items as shown in Table 1 as follow.

Table 1 Construct Reliability and Validity

	Cronbach's Alpha	rho A	Composite Reliability	Average Variance Extracted (AVI)
Organizational Performance	0.922	0.923	0.934	0.588
Strategic Agility	0.926	0.941	0.938	0.607

Based on Table 1, the measurement model is considered valid and reliable, whereas all AVE values were greater than 0.50. Meanwhile, the composite reliability values were greater than the recommended cut-off value of 0.708.

Table 2 The Results of Structural Model

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t-value	P Values
SA -> OP	0.783	0.786	0.039	20.321	0.00

The data analysis result shows that the hypotheses were supported, as shown in Table 2. The construct of strategic agility significantly influences organizational performance ( $\beta = 0.783$ , p-value < 0.05, and t-statistics > 1.645). Besides the structural model analysis, further IPMA analysis was conducted to help complement PLS-SEM results as depicted in Table 3 and Figure 4 to show the 'importance-performance map' of each of strategic-agility key-attributes along with its influence on the strategic agility.

Table 3 The Results of Importance-Performance Matrix Analysis (IPMA)

	Importance	Performances
Awareness	0.443	75.985
Decision	0.243	70.19
Implementation	0.315	76.692

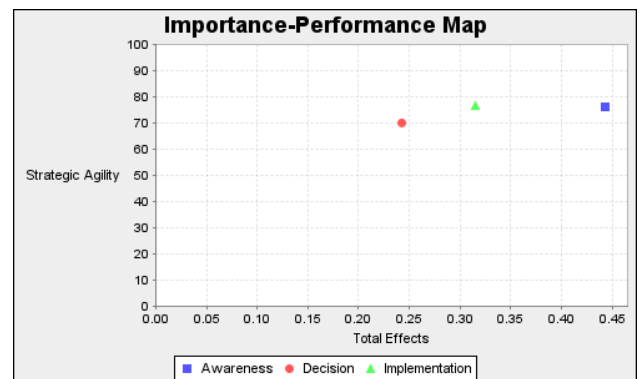


Figure 4 Importance-Performance Matrix Analysis Map

The results in Table 3 and Figure 4 illustrate that the highest importance effect is awareness, followed by implementation and decision to strategic agility. The observations concur with the same finding by Tende and Ekanem [12] study. However, it is shown that all awareness, decision, and implementation equally were on the high-performance influence of strategic agility. These findings support similar findings from the studies conducted by Muthuveloo and Ping [1], Gerald et al. [11] and Chan and Muthuveloo [17]. From the IPMA analysis, the results showed that awareness is the most valuable variable to increase the strategic agility among SMEs in the

manufacturing sector in Malaysia, especially during the pandemic.

## 5. CONCLUSIONS

This research demonstrated that awareness of sensing the changes in the environment and rapid implementation in the decision-making is the crucial ability of strategic agility that need to be embedded within manufacturing SMEs in Malaysia, especially in the pandemic or crisis period. Therefore, this research recommends that SMEs stakeholders in the manufacturing sector should endeavour to embrace strategic agility with quick implementation once a decision is made, when SMEs are aware of the surrounding environment changes to enhance organizational performance to a greater level, especially during a crisis.

This paper contributes theoretically by confirming that the Dynamic Capability Theory (DCT) is suitable to this research, of which strategic agility influences organizational performance in the pandemic era. In contrast, it must be acknowledged that three limitations were experienced in this research. First, this research relied on a self-reporting survey for practical reasons, that can generate a common-method bias. Second, the research employed a purposive-sampling technique, that could generate biased data. Third, this research faced some challenges when performing the survey follow-up and data collection during pandemic movement control applied by the Malaysian government. The authors believe that this article will help clear some important terrains in this subject, which then will encourage other researchers to explore more deeply.

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