Asian Economic and Financial Review
ISSN(e): 2222-6737
ISSN(p): 2305-2147
DOI: 10.55493/5002.v13i12.4930
Vol. 13, No. 12, 981-995.
© 2023 AESS Publications. All Rights Reserved.
URL: www.aessweb.com

Does strategic agility and innovation capability have an impact on firm performance? A study on the Indonesian motorcycle industry

Heru Purwanto[1+]
Harya K. Wiralaga[2]
Ari Saptono[3]

[1,2,3]*Jakarta State University, Indonesia.*
[1]*Email: hpl4jc@gmail.com*
[2]*Email: harya_kuncara@unj.ac.id*
[3]*Email: saptono.fe@unj.ac.id*

(+ Corresponding author)

Article History
Received: 4 July 2023
Revised: 14 September 2023
Accepted: 20 October 2023
Published: 11 December 2023

Keywords
Dynamic capability
Firm performance
Innovation capability
Ordinary capability
Strategic agility
Strategic management.

JEL Classification:
M21; O32.

ABSTRACT

Agility and innovation are two of the most important capabilities that organizations have to deal with in disruptive environments. This research aims to examine the effect of strategic agility and innovation capability on firm performance in the Indonesian motorcycle industry. The research was conducted on 208 companies comprising both OEM (original equipment manufacturer) and tier 1 component suppliers in the supply chain of the Indonesian motorcycle industry. The validity was tested using the content, construct and convergent validity tests, the construct reliability was tested using the one-shot measure reliability test, and the hypothesis testing was carried out using structural equation modeling. The results show that innovation capability has a significant direct effect on strategic agility and firm performance, but in contrast to previous research findings, strategic agility does not have a significant direct effect on firm performance. In addition, strategic agility does not mediate the relationship between innovation capability and firm performance. These findings provide practical guidelines for the motorcycle industry in Indonesia to focus on developing innovation capabilities, particularly process innovation, which is related to the industry's ability to manufacture products at a lower cost and become a pioneer of the latest technology in its field. In the current conditions, companies are advised to focus more on other types of agility, such as operational or supply chain agility rather than strategic agility.

Contribution/Originality: This is the first study that examines the effect of innovation capability and strategic agility on firm performance in industries that change their product/service offerings less frequently.

1. INTRODUCTION

Similar to other industrial sectors, the motorcycle industry, especially in Indonesia, has not been spared from shocks due to disruptions in the industrial environment. Domestic motorcycle sales reached their peak in 2011 with sales of over eight million units per year. Sales then began to decline, with only 3.7 million motorcycles sold in 2020 (AISI, 2021). The biggest environmental challenges faced by the motorcycle industry include electric vehicles (Burns, 2020), ridesharing services such as Gojek and Grab (Techedge, 2020), intelligent, interrelated, and autonomous vehicles (Iyer, 2019), awareness of the need for environmentally friendly vehicles (Burns, 2020), and radical changes in customer behavior (Iyer, 2019). In addition to these, new problems have emerged since the Covid-19 pandemic, for example, disruption to component delivery, and a shortage of ships, among others (IHSmarkit, 2020).

© 2023 AESS Publications. All Rights Reserved.

In his 30 years of research, Dave Ulrich has identified the capabilities that organizations need to succeed, and found that agility is the main capability necessary to deal with disruptive environments (Ulrich, 2018). In previous studies, most researchers also found that agility is the most important factor for dealing with organizational change due to environmental disruption and gaining a competitive advantage (Antonacopoulou, Moldjord, Steiro, & Stokkeland, 2019; Baran & Woznyj, 2021; Kaivo-oja & Lauraeus, 2018; Schoenthaler, 2019).

The next variable chosen in this study is innovation capability because it is the most important variable that allows organizations to respond correctly to disruption in the work environment and has a direct impact on the competitive edge and performance of a company (Al-Hawary & Batayneh, 2015; Farhana & Swietlicki, 2020; Maldonado-Guzmán, Garza-Reyes, Pinzón-Castro, & Kumar, 2018; Migdadi, 2022). Meanwhile, Phankhong, Abu Bakar, and Latief Poespowidjojo (2017) underlined that innovation is a company's ability to elevate performance through a focus on continuous development activities and increase the productivity of existing components within the organization.

The aim of the study is to investigate the impact of strategic agility and innovation capability on company performance in the motorcycle industry in Indonesia. Due to the small amount of empirical research on the impact of strategic agility and innovation capability on company performance both directly and indirectly, and how these two variables interact within the scope of the motorcycle industry, a prototype was created to better understand the factors that affect firm performance. Many researchers have examined the performance of micro, small and medium industries (Benzidia & Makaoui, 2020; Ogunleye, Adeyemo, Adesola, & Yahaya, 2021), the performance of telecommunication providers (Clauss, Abebe, Tangpong, & Hock, 2019; Kurniawan, Budiastuti, Hamsal, & Kosasih, 2020), mining supply chain performance (Naway & Rahmat, 2019), logistics and transportation performance (Ju, Ferreira, & Wang, 2020; Umam & Sommanawat, 2019), general manufacture performance (AlTaweel & Al-Hawary, 2021; Arokodare, 2021; García-Alcaraz et al., 2020), and four-wheeled automotive performance (Aisyah, Purba, Jaqin, Amelia, & Adiyatna, 2021; Dubey, Gunasekaran, & Childe, 2018), but the only study that discusses the performance of the motorcycle industry is by Vasuvanich, Somjai, Rattamanee, and Jermsittiparsert (2020).

Previous research on the effect of strategic agility on organizational performance has been conducted in industries that can quickly change their product and service offerings to customers, such as banks, technology organizations, fashion, and retail (Clauss et al., 2019; Haider & Kayani, 2021; Kale, Aknar, & Başar, 2019; Kurniawan et al., 2020), but the effect of strategic agility on organizations that do not change their product and service offerings as quickly as the automotive industry in general, and the motorcycle industry in particular, is not found in previous references and becomes the novelty for this study. To the best of our knowledge, the variables of strategic agility, innovation capability and company performance in the scope of empirical research have not been discussed simultaneously in one research paper. Therefore, the aim of this research is to build a more balanced and empirical picture of innovation capability and strategic agility activities from the viewpoint of Indonesia's motorcycle industry.

2. LITERATURE REVIEW

2.1. Theoretical Framework

Strategic management undergoes periodical changes in response to the internal needs of the organization as well as to address the challenges of the external environment. To achieve a competitive advantage, a set of management decisions and actions is needed that can help determine the long-term performance of an organization, including environmental scanning, strategic implementation, evaluation and control (David, David, & David, 2017; Wheelen & Hunger, 2018; Witcher, 2020). According to the resource-based theory, an organization can obtain superior performance if it has competitive advantages that arise from implementing value creation strategies through resources and capabilities. These include value, rareness, inimitability, and non-substitutability that cannot be copied and implemented by current and potential competitors (Barney, 1991; Barney, 1986, 2001; Mills, Platts, &

© 2023 AESS Publications. All Rights Reserved.

Bourne, 2003; Peteraf & Bergen, 2003). Capabilities in the context of the resourced-based view are identified as ordinary capabilities (Schoemaker, Heaton, & Teece, 2018; Teece, Peteraf, & Leih, 2016; Teece, 2012; Wilden, Gudergan, Nielsen, & Lings, 2013).

In this paper, innovation capability is viewed from the perspective of resource-based theory, so innovation capability is included in the ordinary capability category (Camisón & Villar-López, 2014; Pavlou & El Sawy, 2011). The key features of ordinary capability are the ability to create value directly through new products and services and being able to remain competitive by adjusting market activities (Ambrosini, Bowman, & Collier, 2009).

In a dynamic environment, it is not enough for a company to have ordinary capability only (Nieves & Haller, 2014); dynamic capabilities are proposed as an enhancement of the resource-based view to provide information on how to maintain an organization's competitive advantage in highly dynamic and changing markets and disrupted organizational environments (Eckstein, Goellner, Blome, & Henke, 2015; Teece, 2012). Dynamic capabilities enable organizations to deal with rapid environmental changes by integrating, configuring and deploying other resources to better detect and grasp opportunities, evade threats, and preserve their competitive advantage (Teece, 2014; Yu, Chavez, Jacobs, & Feng, 2018).

In volatile environmental conditions, where globalization influences customer habits and demands are affected by endless changes, one of the essential factors leading to success for companies is strategic agility (Morton, Stacey, & Mohn, 2018; Vaillant & Lafuente, 2019). In addition to the direct impact within the dynamic capabilities framework, strategic agility enables the reorganization and transformation of existing static resources, knowledge, skills and capabilities into innovative products and process (Makkonen, Pohjola, Olkkonen, & Koponen, 2014; Pavlou & El Sawy, 2011), and function become a mediator (Wang, Senaratne, & Rafiq, 2015) between ordinary capability and company performance. This study is based on the opinions of Cepeda and Vera (2007) and Fawcett, Wallin, Allred, Fawcett, and Magnan (2011), which state that an increase in organizational performance can be obtained from the joint use of ordinary capabilities and dynamic capabilities, thus both types of capabilities are used.

2.2. Hypotheses

2.2.1. The Effect of Innovation Capability on Firm Performance

All empirical studies on the topic of the influence of innovation capacity on organizational performance obtained positive results, including Khan and Kumar (2019), who found that there are three grades of technological capability needed to improve the performance of the Indian automotive industry, namely elementary grade (operational capability), medium grade (investment capability), and advanced grade (innovation capability). Mir, Casadesús, and Petnji (2016) studied the automotive industry in Spain and found that innovation capability directly and positively influences innovation performance and ultimately influences organizational performance. Masoomzadeh, Zakaria, Masrom, Streimikiene, and Tavakoli (2019) concluded that, apart from the direct impact on organizational performance, the mediating impact of innovation capability appears to be equally important. From the description above, we can conclude that innovation capability has a positive effect on firm performance. Therefore, we hypothesize that:

Hypothesis 1 (H1): Innovation capability has a positive and significant influence on firm performance.

2.2.2. The Effect of Innovation Capability on Strategic Agility

Olaleye, Anifowose, Efuntade, and Arije (2021) stated that innovation capability has a positive and significant influence on strategic agility, while strategic agility mediates the relationship between innovation ability and corporate resilience. However, AlTaweel and Al-Hawary (2021) stated that strategic agility has a positive and significant impact on innovation capability. This happens because strategic agility provides the capability for organizations to be able to recognize opportunities and threats that occur in their environment and respond and adapt quickly using their resources effectively and efficiently. By looking at innovation capability as an ordinary

© 2023 AESS Publications. All Rights Reserved.

capability and strategic agility as a dynamic capability, where one of the roles of dynamic capability is to reconfigure ordinary capability, it can be concluded from the two studies mentioned above that innovation capability has a positive and significant influence on strategic agility. Teece et al. (2016) suggested that dynamic capability is a framework that streamlines agility through (a) sensing, (b) seizing and (c) shifting. Most researchers believe that certain dynamic capabilities are composite capabilities that allow an organization to achieve strategic agility (Gurkov, Goldberg, & Saidov, 2017; Hock, Clauss, & Schulz, 2016; Ivory & Brooks, 2018), so the insight can be drawn that innovation capability can influence strategic agility through the seizing mechanism. Therefore, we can formulate the second hypothesis as follows:

Hypothesis 2 (H2): Innovation capability has a positive and significant influence on strategic agility.

2.2.3. The Effect of Strategic Agility on Firm Performance

Previous studies on strategic agility were generally carried out in an industrial context on companies such as banks, technology organizations, fashion and retail that could quickly change their product and service offerings to customers, with most of the findings stating that the use of strategic agility by companies can convincingly increase excellence, organizational competitiveness and, in turn, organizational performance (Clauss et al., 2019; Haider & Kayani, 2021; Kale et al., 2019; Kurniawan et al., 2020). The effect of strategic agility on organizations that cannot quickly change their product offerings or services has not yet attracted the attention of researchers. Similar to organizations in other industries, the motorcycle industry is presently operating in a disruptive business environment. Electric motorbikes, changes in customer behavior, ridesharing, and smart and connected vehicles will likely disrupt the industry. To succeed, the motorcycle industry's supply chain requires strategic agility, as it can significantly affect business operations and competitiveness. Strategic agility is valued more when uncertainty and disruption are regular occurrences in an organization's work environment (Schilke, 2014). Therefore, strategic agility can be formulated as an important capability for the motorcycle industry supply chain to manage rapid changes that have the potential to disrupt the organization's performance and future. Therefore, we propose that:

Hypothesis 3 (H3): Strategic agility has a positive and significant influence on firm performance.

2.2.4. The Role of Strategic Agility Mediates the Effect of Innovation Capability on Firm Performance

When organizational excellence rests on the ability to create market opportunities through the provision of new products or services (Khoshnood & Nematizadeh, 2017), dynamic capabilities related to adaptation, orchestration and innovation processes in identifying new products or services are also related to the potential to reach new markets (Teece, 2014). It is hoped that by becoming an intervening variable, strategic agility will enable organizations to adapt to changing business environments and create value through updating and reconfiguring their innovation capability and be more active in offering new products or services according to market needs (Patrício, Pereira, & Santos, 2019). So rather than solely focusing on solving current problems, it will result in a competitive advantage and improve organizational performance. In their research of 224 senior managers in finance, commercial, and manufacturing companies, AlTaweel and Al-Hawary (2021) found that innovation capability has a mediating role in enhancing the effect of strategic agility on firm performance. Zhou, Zhou, Feng, and Jiang (2019) found that innovation capability plays a mediating role in increasing the effect of marketing agility on financial performance. From these two studies, it is innovation capability that mediates strategic agility, but given the indirect role of the two variables on firm performance, the mediation roles can be exchanged. Therefore, based on the above considerations, the next hypothesis is proposed as follows:

Hypothesis 4 (H4): Strategic agility mediates the effect of innovation capability on firm performance.

By considering the theoretical framework and the above hypotheses, the hypothetical model shown in Figure 1 was created.

© 2023 AESS Publications. All Rights Reserved.

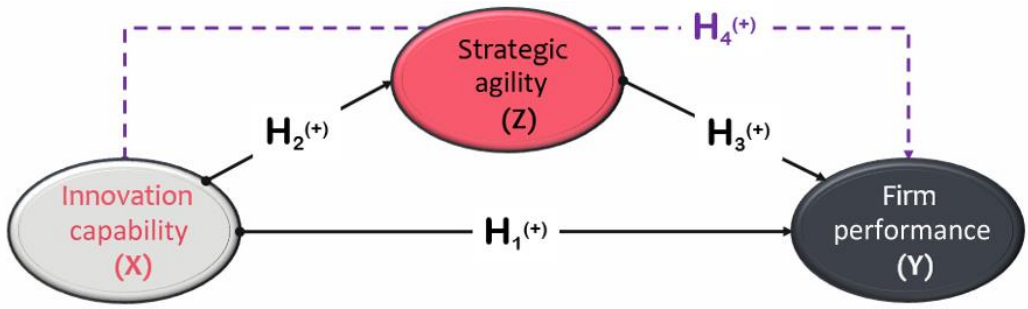

Figure 1. Research hypothesis model.

3. METHODOLOGY

3.1. Population and Sample

With little empirical research examining the performance of the motorcycle industry, this study will provide a new understanding. The data was taken from the top three motorcycle manufacturing companies in Indonesia (Honda, Yamaha and Suzuki) and tier 1 suppliers, which manufacture around 90% of motorcycles in Indonesia (AISI, 2021). The respondents are managers, senior managers, general managers, and directors in these companies. Data collection was carried out from May 13, 2022, to July 24, 2022, using a questionnaire on Google Forms, and the link to the questionnaire was sent via email or WhatsApp. Data was gathered from 68 OEMs and 140 suppliers that fully completed the questionnaire. The sample was selected using the probability sampling method with a proportional random sampling technique (Sekaran & Bougie, 2020). The sample selection considered the proportion of the value of motorcycle components and overall risk management, so it is hoped that the generalization process can be carried out based on the data obtained from the target population.

3.2. Research Instruments

Questionnaires are the most widely used tool in social and managerial studies, specifically to collect data from individual respondents (Saunders, Lewis, & Thornhill, 2019). The first part of the questionnaire was created to collect information on the respondent's profile (position, how long they've worked in a managerial position, type of work, type of company, number of OEM companies that are customers, number of employees, and company experience in the motorcycle industry). The second part measures the variables of the research. Different to most other studies that used a 5-point or 7-point Likert scale questionnaire, the questionnaire in this study uses a 6-point Likert scale to avoid the tendency of respondents to give a score in the middle (Edwards, 1957).

Innovation capability variables are measured using four dimensions (product innovation, process innovation, market innovation, and organizational innovation) and 16 indicators based on research instruments from Zhou et al. (2019); Migdadi (2022); Najafi-Tavani, Najafi-Tavani, Naudé, Oghazi, and Zeynaloo (2018) and Camisón and Villar-López (2014). Most of the previous research only used two dimensions—product innovation and process innovation (AlTaweel & Al-Hawary, 2021; Camisón & Villar-López, 2014; Rotjanakorn, Sadangharn, & Na-Nan, 2020). This study added market innovation and organizational innovation because they are closely related to strategic agility, which is the ability of organizations to proactively perceive change, have a flexible approach to change, trust each other in the face of new developments, and continuously adjust the strategic direction of the organization and develop innovative ways to create value. Strategic agility variables are measured using three dimensions (strategic sensitivity, resource fluidity, and leadership unity) proposed by Doz and Kosonen (2010) and 11 indicators based on research instruments from Hock et al. (2016) and Clauss et al. (2019). Finally, firm performance variables are measured using three dimensions (operational performance, market performance, and financial performance) and six indicators based on research instruments from Migdadi (2022); Clauss et al. (2019) and García-Alcaraz et al. (2020). These three dimensions were used because of the need to understand which type of performance is most influenced by the variables studied. This is what distinguishes this paper from previous studies, as most do not specifically

© 2023 AESS Publications. All Rights Reserved.

distinguish between the types of organizational performance (Dubey et al., 2018; Masoomzadeh et al., 2019; Torres, Sidorova, & Jones, 2018) or only focus on one type, for example, operational performance (Delic & Eyers, 2020; Geyi, Yusuf, Menhat, Abubakar, & Ogbuke, 2020) or financial performance (Camisón & Villar-López, 2014; Hwang & Kim, 2019).

Before distributing, the research questionnaire went through several tests. In the first stage, a literature study was carried out on similar research to select items for the questionnaire's construct. Then each item was tested and refined using input from four experts on the research topic. A pilot test was then carried out and the results were processed using SPSS 25. Construct validity was measured by comparing the r_{count} value with r_{table}; if the r_{count} value is greater than r_{table}, then the difference is considered significant and the instrument is declared valid (Krabbe, 2017). The r_{count} value of the 37 research indicators is between 0.523 and 0.872, which is greater than r_{table} 0.325, so all research indicators are declared valid. Reliability testing was carried out using Cronbach's alpha test. A construct is declared reliable if it has a Cronbach's alpha value > 0.60 (Ghozali, 2017). From the test results, the Cronbach's alpha value for all variables/constructs ranged from 0.881 to 0.968, which is more than 0.60, so the instrument was declared reliable and usable.

3.3. Data Analysis Techniques and Hypothesis Testing

Partial least squares structural equation modeling (PLS-SEM) with SmartPLS 3 software was used to perform an inferential analysis to test the research models and hypotheses. There are three methods for processing statistical data used by researchers in this study: an exploratory factor analysis (EFA) to ensure that the construction of the study is simple, a confirmatory factor analysis (CFA) to ensure that the quality of the model is a good fit for the indicators (Hair, Hollingsworth, Randolph, & Chong, 2017), and SEM to test the hypotheses. The mediating effect follows the approach taken by Baron and Kenny (1986).

4. RESULTS AND DISCUSSION

4.1. Profile of Research Respondents

The profiles of respondents in this study were grouped into seven categories: position, experience in managerial positions, field of work, type of company, number of OEM companies that became customers, number of employees, and the length of experience of the company in the motorcycle industry (see Table 1).

Table 1. Profile of research respondents.

Respondent identity variables	Category	Quantity	Percentage
1. Respondent's position in the company	Director	8	3.8%
	General manager	15	7.2%
	Senior manager	24	11.5%
	Manager	161	77.4%
2. The length of time the respondent held a managerial position in the company	Less than 3 years	28	13.5%
	3 to 5 years	28	13.5%
	5 to 10 years	44	21.2%
	10 to 15 years	32	15.4%
	More than 15 years	76	36.5%
3. Field of work of respondents in the company	Marketing	66	31.7%
	Production/Production planning and inventory	64	30.8%
	Quality	24	11.5%
	Engineering	23	11.1%
	Purchasing	13	6.3%
	Human resources and general	8	3.8%

© 2023 AESS Publications. All Rights Reserved.

Respondent identity variables	Category	Quantity	Percentage
	affairs		
	Finance/Accounting	4	1.9%
	Information Tech.	2	1.0%
	Other	4	1.9%
4. Type of company where the respondent works	OEM	68	32.7%
	Supplier	140	67.3%
5. (Specially for suppliers) Number of OEMs who are customers of the respondent company	1 Company	25	17.9%
	2 Companies	29	20.7%
	More than 2 companies	76	54.3%
	Confidential	10	7.1%
6. Total number of employees in the respondent's company	Less than 50 people	5	2.4%
	51 to 100 people	5	2.4%
	101 to 500 people	49	23.6%
	More than 500 people	149	71.6%
7. The experience of the respondent's company in the automotive industry	Less than 5 years	3	1.4%
	5 to 10 years	6	2.9%
	10 to 15 years	22	10.6%
	More than 15 years	177	85.1%

4.2. Measurement Model Estimation

Measurement of the estimation model was carried out using a two-level confirmatory factor analysis (CFA) approach. This approach aims to test the validity and reliability of each research construct. The first order CFA shows the relationship between the indicators and their dimensions, while the second order CFA shows the relationship between the dimensions and the research variables. From the first CFA sequence it was found that the IC-10 and STA-1 indicators had a loading value of less than 0.7 (Hair, Hult, Ringle, & Sarstedt, 2021), so these were excluded from the study. Then a second order CFA was performed to estimate the validity and reliability of the 18 dimensions. The validity in this research was checked based on convergent validity and discriminant validity, while the reliability was determined based on the value of composite reliability and Cronbach's alpha. The validity and reliability test results are presented in Table 2. The results show that the standardized loading factor (SFL) of all constructs is greater than 0.7, the average variance extracted (AVE) values are greater than 0.5, the composite reliability (CR) values are greater than 0.7, and the Cronbach's alpha (α) values are greater than 0.7. Therefore, the construct is considered valid and reliable.

Table 2. Results of CFA research variables.

Construct	SFL ≥ 0.7	AVE ≥ 0.5	CR ≥ 0.7	α ≥ 0.7	Note
Variable: Innovation capability		0.613	0.894	0.936	Good reliability
○ Dimension: product innovation capability	0.844				Good validity
○ Dimension: process innovation capability	0.899				Good validity
○ Dimension: market innovation capability	0.873				Good validity
○ Dimension: organizational market capability	0.887				Good validity
Variable: Strategic agility		0.846	0.943	0.909	Good reliability
○ Dimension: strategic sensitivity	0.931				Good validity
○ Dimension: resource fluidity	0.920				Good validity
○ Dimension: leadership unity	0,906				Good validity
Variable: Firm performance		0.783	0.916	0.862	Good reliability
○ Dimension: operational performance	0.937				Good validity
○ Dimension: market performance	0.883				Good validity
○ Dimension: financial performance	0.811				Good validity

Note: SFL = Standardized factor loading; CR = Composite reliability; AVE = Average variance extracted; α = Cronbach's alpha.

© 2023 AESS Publications. All Rights Reserved.

4.3. Structural Model Assessment

Structural models are used to predict causal relationships between latent variables or variables that cannot be directly measured. The structural model that describes the causal relationships between latent variables is based on the essence of the theory proposed in Figure 1. The structural model test was carried out using bootstrapping and blindfolding procedures in SmartPLS. The outcomes of the fit model obtained using a p-value < 0.5 are: SRMR = 0.045, d_ULS = 0.339, d_G = 0.373, Chi-square = 416.149, NFI = 0.884, and rms Theta = 0.182. Thus, the results provide irrefutable evidence that the model is fit for use with the research data, as shown in Figure 2.

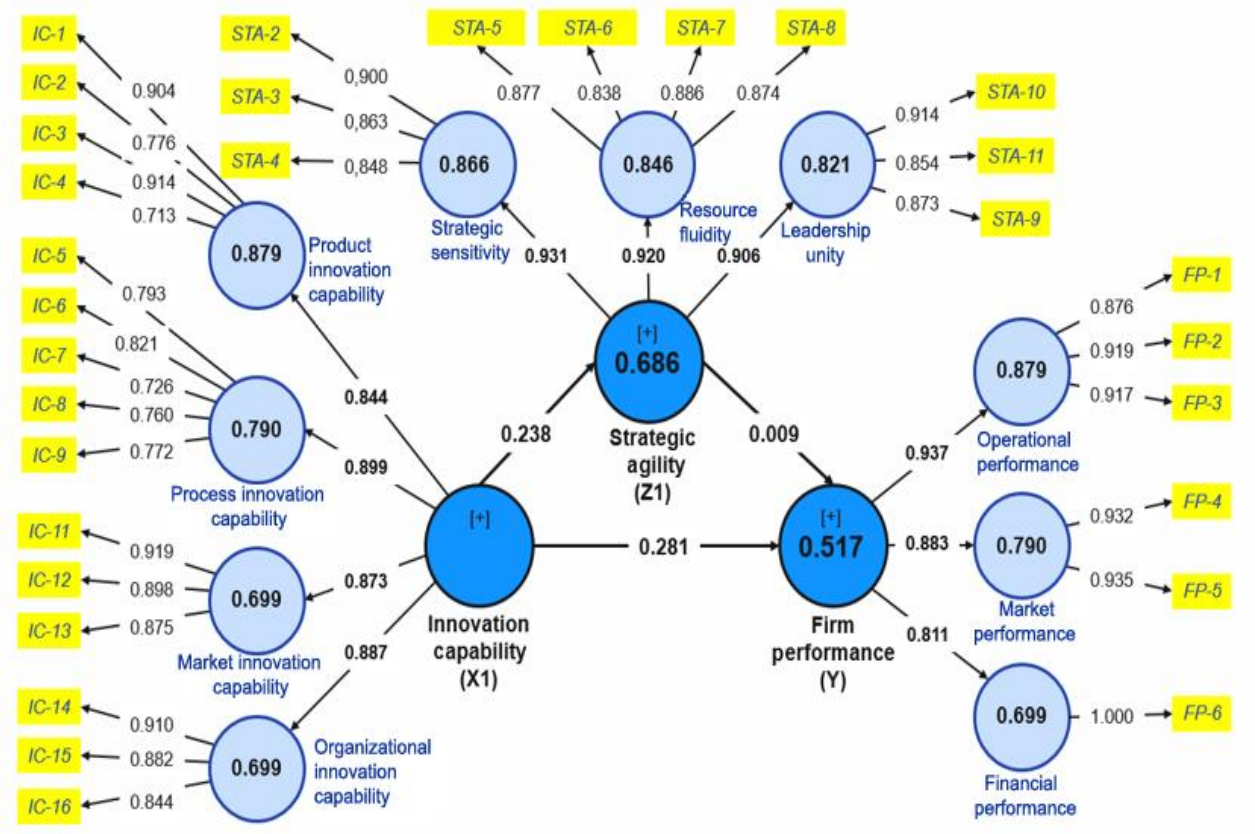

Figure 2. SEM estimation results with composite indicators.

4.4. Hypothesis Testing

After the structural model assessment, the next stage is to estimate the relationships between the variables that represent each theoretical hypothesis. The results of the direct and indirect influence checks are presented in Table 3, which show a significant direct effect of innovation capability on firm performance (effect = 28.1%; T-statistic = 2.595; p-value = 0.009). There is also a significant direct effect of innovation capability on strategic agility (influence = 23.8 %; T-statistic = 3.313; p-value = 0.001). Meanwhile, there was no significant direct effect of strategic agility on firm performance (influence = 0.9%; T-statistic = 0.064; p-value = 0.949), and the results of the indirect path significance test for the effect of business intelligence on organizational performance through strategic agility show a positive effect (value = 0.2%) but it is not significant (T-statistic value = 0.062; p-value = 0.950). Therefore, H1 and H2 are accepted, while H3 and H4 are rejected.

© 2023 AESS Publications. All Rights Reserved.

Table 3. Structural relationships test results.

Hypothesis	Variable	Original sample	Sample mean	Standard deviation	T-statistic	P-value	Notes
H1	Innovation capability (X) ➔ Firm performance (Y)	0.281	0.285	0.108	2.595	0.009	S
H2	Innovation capability (X) ➔ Strategic agility (Z)	0.238	0.236	0.072	3.313	0.001	S
H3	Strategic agility (Z) ➔ Firm performance (Y)	0.009	0.014	0.145	0.064	0.949	NS
H4	Innovation capability (X) ➔ Strategic agility (Z) ➔ Firm performance (Y)	0.002	0.004	0.036	0.062	0.950	NM

Note: S = Significant; NS = Not significant; NM = No mediation.

4.5. Discussion

This study has revealed some important findings. First, innovation capability has a positive and significant direct impact on firm performance. This influence is mainly related to process innovation having a direct effect on operational performance, which is the dimension of the organizational performance variable that has the highest average score and load factor. The above can also be proven practically by increasing the number of exports from year to year, which can only be achieved through quality and global cost competitiveness (Beti, 2018; Wijaya, 2022).

Second, innovation capability has a positive and significant direct effect on strategic agility. As most researchers have found that some dynamic capabilities are meta capabilities that enable an organization to achieve strategic agility (Gurkov et al., 2017; Hock et al., 2016; Ivory & Brooks, 2018), it can be concluded that innovation capability positively influences strategic agility through the seizing mechanism using the organization innovation dimension as well as through the shifting and transforming mechanism using the product innovation and process innovation dimensions.

Third, in contrast to the results of previous studies, strategic agility does not have a significant direct effect on the performance of firms in the motorcycle industry in Indonesia. This is the case because previous research regarding the effect of strategic agility on firm performance was carried out in industries that can quickly change their product and service offerings to their customers (Clauss et al., 2019; Haider & Kayani, 2021; Kale et al., 2019; Kurniawan et al., 2020).

Meanwhile, the impact of strategic agility on organizations that do not change product or service offerings quickly, such as in the automotive or motorcycle industries, has not been studied until now. This phenomenon is related to the management position of OEM companies who see that decisions related to new offers to customers are dominated more by principal companies than local partner companies (Jakhotiya, 2019). In a research of the Japanese brand automotive industry in Thailand, Korwatanasakul (2023) found that even though local companies achieved acquisitions and technical improvements, the principal companies still monopolized research and development activities for new products and innovations, and the position of local management in making new offers to customers is small. This is why the effect of strategic agility on the performance of the Indonesian motorcycle industry is perceived as insignificant in this study.

Finally, it was found that strategic agility does not play a mediating role in the effect of innovation capability on firm performance due to its insignificant effect on the performance of firms in the motorcycle industry in Indonesia.

© 2023 AESS Publications. All Rights Reserved.

5. CONCLUSION

5.1. Theoretical and Practical Implication

From the perspective of the resource-based theory and the dynamic capability theory, the findings of this study contribute theoretically to explaining the influence of innovation capability and strategic agility on firm performance and how strategic agility mediates the relationship between innovation capability and organizational performance.

In terms of practical implications, the research provides guidance for motorcycle companies in Indonesia on how to face competitive challenges in disruptive environmental conditions. These findings provide practical guidance on developing innovation capability, especially process innovation. This is related to how the industry is able to implement manufacturing processes with low production costs and become the pioneer of the latest technology in its field.

Next, by looking at the current conditions where sales of electric motorbikes are still not significant compared to conventional motorbikes, changes in customer behavior in terms of mass transport and ridesharing are still limited to big cities, and smart and connected vehicles are not yet popular. Therefore, to be more competitive, the Indonesian motorcycle industry should not focus on strategic agility, but focus on other types of agility, such as supply chain or operational agility, to overcome temporary and short-term disruptions in the value chain and market environment (e.g., volatilities in demand, supply side delays, and fluctuations in component prices) and respond quickly and flexibly to those changes within the current value chain (e.g., reduced material change times, reduction of manufacturing lead times, and adjustment of delivery capacity) (Eckstein et al., 2015).

5.2. Study Limitations

This research was conducted during a pandemic, where the environmental challenges were different from normal conditions. These conditions may have affected the psychological condition of the respondents when answering the questionnaire. Even though measurable answer choices were used, bias cannot be completely eliminated.

5.3. Future Research

Future researchers are advised to take a more in-depth look at one of the results of this study, where strategic agility did not have a significant positive impact on improving organizational performance. From the literature review, it was found that this difference occurred because previous research on the effect of strategic agility on firm performance was carried out in companies that could quickly change product and service offerings, while the impact of strategic agility on organizations that did not have the capacity to quickly change product and service offerings has not been previously studied. To be able to generalize these findings, research using the same model is needed, but with a focus on industries that do not change their product and service offerings quickly, such as the car manufacturing industry.

Funding: This study received no specific financial support.
Institutional Review Board Statement: The Ethical Committee of the Jakarta State University, Indonesia has granted approval for this study (Ref. No. A561).
Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.
Data Availability Statement: Upon a reasonable request, the supporting data of this study can be provided by the corresponding author.
Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

© 2023 AESS Publications. All Rights Reserved.

REFERENCES

AISI. (2021). *Statistic distribution*. Retrieved from https://www.aisi.or.id/statistic/

Aisyah, S., Purba, H. H., Jaqin, C., Amelia, Z. R., & Adiyatna, H. (2021). Identification of implementation Lean, Agile, Resilient and Green (LARG) approach in indonesia automotive industry. *Journal Européen Des Systèmes Automatisés*, *54*(2), 317-324. https://doi.org/10.18280/jesa.540214

Al-Hawary, S. I. S., & Batayneh, A. M. I. (2015). A study of the strategic performance of shareholding industrial organizations in Jordan: Using Z-score model. *International Journal of Business and Social Science*, *6*(11), 177-182.

AlTaweel, I. R., & Al-Hawary, S. I. (2021). The mediating role of innovation capability on the relationship between strategic agility and organizational performance. *Sustainability*, *13*(14), 7564. https://doi.org/10.3390/su13147564

Ambrosini, V., Bowman, C., & Collier, N. (2009). Dynamic capabilities: An exploration of how firms renew their resource base. *British Journal of Management*, *20*, S9-S24. https://doi.org/10.1111/j.1467-8551.2008.00610.x

Antonacopoulou, E. P., Moldjord, C., Steiro, T. J., & Stokkeland, C. (2019). The new learning organisation: PART I—institutional reflexivity, high agility organising and learning leadership. *The Learning Organization*, *26*(3), 304-318. https://doi.org/10.1108/tlo-10-2018-0159

Arokodare, M. (2021). The moderating effect of environmental turbulence on the strategic agility-performance relationship: Empirical evidence from Lagos State, Nigeria. *Business and Management Research*, *10*(1), 1-17. https://doi.org/10.5430/bmr.v10n1p1

Baran, B. E., & Woznyj, H. M. (2021). Managing VUCA: The human dynamics of agility. *Organizational Dynamics*, *50*(2), 100787. https://doi.org/10.1016/j.orgdyn.2020.100787

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99-120. https://doi.org/10.1177/014920639101700108

Barney, J. B. (1986). Strategic factor markets: Expectations, luck, and business strategy. *Management Science*, *32*(10), 1231-1241. https://doi.org/10.1287/mnsc.32.10.1231

Barney, J. B. (2001). Is the resource-based "view" a useful perspective for strategic management research? Yes. *Academy of Management Review*, *26*(1), 41-56. https://doi.org/10.5465/amr.2001.4011938

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Benzidia, S., & Makaoui, N. (2020). Improving SMEs performance through supply chain flexibility and market agility: IT orchestration perspective. *Supply Chain Forum*, *21*(3), 173–184. https://doi.org/10.1080/16258312.2020.1801108

Beti, D. (2018). *3 Reasons for Yamaha Indonesia to become an export base*. Retrieved from https://www.liputan6.com/otomotif/read/3798236/3-alasan-yamaha-indonesia-jadi-basis-ekspor

Burns, M. (2020). Top 5 challenges automotive industry will face in the 2020s.

Camisón, C., & Villar-López, A. (2014). Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of Business Research*, *67*(1), 2891-2902. https://doi.org/10.1016/j.jbusres.2012.06.004

Cepeda, G., & Vera, D. (2007). Dynamic capabilities and operational capabilities: A knowledge management perspective. *Journal of Business Research*, *60*(5), 426-437. https://doi.org/10.1016/j.jbusres.2007.01.013

Clauss, T., Abebe, M., Tangpong, C., & Hock, M. (2019). Strategic agility, business model innovation, and firm performance: An empirical investigation. *IEEE Transactions on Engineering Management*, *68*(3), 767-784. https://doi.org/10.1109/tem.2019.2910381

David, F. R., David, F. R., & David, M. E. (2017). *Strategic management: Concepts and cases: A competitive advantage approach* (16th ed.). London: Pearson.

Delic, M., & Eyers, D. R. (2020). The effect of additive manufacturing adoption on supply chain flexibility and performance: An empirical analysis from the automotive industry. *International Journal of Production Economics*, *228*, 107689. https://doi.org/10.1016/j.ijpe.2020.107689

© 2023 AESS Publications. All Rights Reserved.

Doz, Y. L., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long Range Planning*, *43*(2–3), 370–382. https://doi.org/10.1016/j.lrp.2009.07.006

Dubey, R., Gunasekaran, A., & Childe, S. J. (2018). Big data analytics capability in supply chain agility: The moderating effect of organizational flexibility. *Management Decision*, *57*(8), 2092-2112. https://doi.org/10.1108/md-01-2018-0119

Eckstein, D., Goellner, M., Blome, C., & Henke, M. (2015). The performance impact of supply chain agility and supply chain adaptability: The moderating effect of product complexity. *International Journal of Production Research*, *53*(10), 3028–3046. https://doi.org/10.1080/00207543.2014.970707

Edwards, A. L. (1957). *Techniques of attitude scale construction*. New York: Appleton-Century-Crofts.

Farhana, M., & Swietlicki, D. (2020). Dynamic capabilities impact on innovation: Niche market and startups. *Journal of Technology Management & Innovation*, *15*(3), 83-96. https://doi.org/10.4067/s0718-27242020000300083

Fawcett, S. E., Wallin, C., Allred, C., Fawcett, A. M., & Magnan, G. M. (2011). Information technology as an enabler of supply chain collaboration: A dynamic-capabilities perspective. *Journal of Supply Chain Management*, *47*(1), 38-59. https://doi.org/10.1111/j.1745-493x.2010.03213.x

García-Alcaraz, J. L., Martínez-Loya, V., Díaz-Reza, J. R., Blanco-Fernández, J., Jiménez-Macías, E., & López, A. J. G. (2020). Effect of ICT integration on SC flexibility, agility and company'performance: The Mexican maquiladora experience. *Wireless Networks*, *26*(7), 4805-4818. https://doi.org/10.1007/s11276-019-02068-6

Geyi, D. G., Yusuf, Y., Menhat, M. S., Abubakar, T., & Ogbuke, N. J. (2020). Agile capabilities as necessary conditions for maximising sustainable supply chain performance: An empirical investigation. *International Journal of Production Economics*, *222*, 107501. https://doi.org/10.1016/j.ijpe.2019.09.022

Ghozali, I. (2017). *Structural equation model concept and application with AMOS program 24*. Semarang: Diponegoro University Publishing Agency.

Gurkov, I., Goldberg, A., & Saidov, Z. (2017). Strategic agility and persistence: HEM's entry into the Russian market of expendable materials for clinical laboratories. *Global Business and Organizational Excellence*, *36*(5), 12-19. https://doi.org/10.1002/joe.21797

Haider, S. A., & Kayani, U. N. (2021). The impact of customer knowledge management capability on project performance-mediating role of strategic agility. *Journal of Knowledge Management*, *25*(2), 298-312. https://doi.org/10.1108/jkm-01-2020-0026

Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, *117*(3), 442-458. https://doi.org/10.1108/IMDS-04-2016-0130

Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling* (2nd ed.). Los Angeles, CA, USA: SAGE Publications, Inc.

Hock, M., Clauss, T., & Schulz, E. (2016). The impact of organizational culture on a firm's capability to innovate the business model. *R&D Management*, *46*(3), 433-450. https://doi.org/10.1111/radm.12153

Hwang, T., & Kim, S. T. (2019). Balancing in-house and outsourced logistics services: Effects on supply chain agility and firm performance. *Service Business*, *13*(3), 531-556. https://doi.org/10.1007/s11628-018-00394-x

IHSmarkit. (2020). *Coronavirus impact on automotive industry*. Retrieved from https://ihsmarkit.com/research-analysis/coronavirus-impact-on-automotive-industry.html

Ivory, S. B., & Brooks, S. B. (2018). Managing corporate sustainability with a paradoxical lens: Lessons from strategic agility. *Journal of Business Ethics*, *148*(2), 347-361. https://doi.org/10.1007/s10551-017-3583-6

Iyer, S. (2019). *Top 7 critical challenges automotive industry is facing today*. Retrieved from https://www.gminsights.com/blogs/todays-challenges-in-automotive-industry

Jakhotiya, G. (2019). *A critical evaluation of the economics of Indian automobile industry*. Retrieved from https://mpra.ub.uni-muenchen.de/id/eprint/92080

© 2023 AESS Publications. All Rights Reserved.

Ju, X., Ferreira, F. A., & Wang, M. (2020). Innovation, agile project management and firm performance in a public sector-dominated economy: Empirical evidence from high-tech small and medium-sized enterprises in China. *Socio-Economic Planning Sciences, 72*, 100779. https://doi.org/10.1016/j.seps.2019.100779

Kaivo-oja, J. R. L., & Lauraeus, I. T. (2018). The VUCA approach as a solution concept to corporate foresight challenges and global technological disruption. *Foresight, 20*(1), 27-49. https://doi.org/10.1108/fs-06-2017-0022

Kale, E., Aknar, A., & Başar, Ö. (2019). Absorptive capacity and firm performance: The mediating role of strategic agility. *International Journal of Hospitality Management, 78*, 276-283. https://doi.org/10.1016/j.ijhm.2018.09.010

Khan, M. T., & Kumar, N. (2019). *Technology entrepreneurship capability development in Indian automotive industry*. Paper presented at the Advances in Interdisciplinary Engineering: Select Proceedings of FLAME 2018. Springer Singapore.

Khoshnood, N. T., & Nematizadeh, S. (2017). Strategic agility and its impact on the competitive capabilities in Iranian private banks. *International Journal of Business and Management, 12*(2), 220-229. https://doi.org/10.5539/ijbm.v12n2p220

Korwatanasakul, U. (2023). *Thailand and the middle-income trap: An analysis from the global value chain perspective* Puey Ungphakorn Institute for Economic Research. No. 202.

Krabbe, P. F. M. (2017). Validity the measurement of health and health status. *Concepts, Methods and Applications from a Multidisciplinary Perspective*, 113-134. https://doi.org/10.1016/b978-0-12-801504-9.00007-6

Kurniawan, R., Budiastuti, D., Hamsal, M., & Kosasih, W. (2020). The impact of balanced agile project management on firm performance: The mediating role of market orientation and strategic agility. *Review of International Business and Strategy, 30*(4), 457-490. https://doi.org/10.1108/ribs-03-2020-0022

Makkonen, H., Pohjola, M., Olkkonen, R., & Koponen, A. (2014). Dynamic capabilities and firm performance in a financial crisis. *Journal of Business Research, 67*(1), 2707-2719. https://doi.org/10.1016/j.jbusres.2013.03.020

Maldonado-Guzmán, G., Garza-Reyes, J. A., Pinzón-Castro, S. Y., & Kumar, V. (2018). Innovation capabilities and performance: Are they truly linked in SMEs? *International Journal of Innovation Science, 11*(1), 48-62. https://doi.org/10.1108/ijis-12-2017-0139

Masoomzadeh, A., Zakaria, N. W. W., Masrom, M., Streimikiene, D., & Tavakoli, R. (2019). Organizational innovation factors, capabilities and organizational performance in automotive industry. *Montenegrin Journal of Economics, 15*(3), 83-100. https://doi.org/10.14254/1800-5845/2019.15-3.6

Migdadi, M. M. (2022). Knowledge management processes, innovation capability and organizational performance. *International Journal of Productivity and Performance Management, 71*(1), 182-210. https://doi.org/10.1108/ijppm-04-2020-0154

Mills, J., Platts, K., & Bourne, M. (2003). Competence and resource architectures. *International Journal of Operations & Production Management, 23*(9), 977-994. https://doi.org/10.1108/01443570310491738

Mir, M., Casadesús, M., & Petnji, L. H. (2016). The impact of standardized innovation management systems on innovation capability and business performance: An empirical study. *Journal of Engineering and Technology Management, 41*, 26-44. https://doi.org/10.1016/j.jengtecman.2016.06.002

Morton, J., Stacey, P., & Mohn, M. (2018). Building and maintaining strategic agility: an agenda and framework for executive IT leaders. *California Management Review, 61*(1), 94-113. https://doi.org/10.1177/0008125618790245

Najafi-Tavani, S., Najafi-Tavani, Z., Naudé, P., Oghazi, P., & Zeynaloo, E. (2018). How collaborative innovation networks affect new product performance: Product innovation capability, process innovation capability, and absorptive capacity. *Industrial Marketing Management, 73*, 193-205. https://doi.org/10.1016/j.indmarman.2018.02.009

Naway, F., & Rahmat, A. (2019). The mediating role of technology and logistic integration in the relationship between supply chain capability and supply chain operational performance. *Uncertain Supply Chain Management, 7*(3), 553-566.

Nieves, J., & Haller, S. (2014). Building dynamic capabilities through knowledge resources. *Tourism Management, 40*, 224-232. https://doi.org/10.1016/j.tourman.2013.06.010

Ogunleye, P., Adeyemo, S., Adesola, M., & Yahaya, Y. (2021). Strategic agility and small and medium enterprises' performance: Evidence from Osun State, Nigeria. *South Asian Journal of Social Studies and Economics, 11*(1), 26-36.

© 2023 AESS Publications. All Rights Reserved.

Olaleye, B., Anifowose, O., Efuntade, A., & Arije, B. (2021). The role of innovation and strategic agility on firms' resilience: A case study of tertiary institutions in Nigeria. *Management Science Letters*, *11*(1), 297-304. https://doi.org/10.5267/j.msl.2020.8.003

Patrício, V. S., Pereira, L. F., & Santos, J. P. (2019). *Dynamic capabilities trends: A brief review of the state of the art.* Paper presented at the In 2019 IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC) (pp. 1-5). IEEE.

Pavlou, P. A., & El Sawy, O. A. (2011). Understanding the elusive black box of dynamic capabilities. *Decision Sciences*, *42*(1), 239-273. https://doi.org/10.1111/j.1540-5915.2010.00287.x

Peteraf, M. A., & Bergen, M. E. (2003). Scanning dynamic competitive landscapes: A market-based and resource-based framework. *Strategic Management Journal*, *24*(10), 1027-1041. https://doi.org/10.1002/smj.325

Phankhong, T., Abu Bakar, L. J., & Latief Poespowidjojo, D. A. (2017). The mediating effect of innovativeness on innovation strategy, atmosphere, culture and organizational performance: Proposed theoretical framework. *International Journal of Economic Research*, *14*(14PartII), 359–369.

Rotjanakorn, A., Sadangharn, P., & Na-Nan, K. (2020). Development of dynamic capabilities for automotive industry performance under disruptive innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, *6*(4), 97. https://doi.org/10.3390/joitmc6040097

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Harlow: Financial Times/Prentice Hall.

Schilke, O. (2014). On the contingent value of dynamic capabilities for competitive advantage: The nonlinear moderating effect of environmental dynamism. *Strategic Management Journal*, *35*(2), 179-203. https://doi.org/10.1002/smj.2099

Schoemaker, P. J., Heaton, S., & Teece, D. (2018). Innovation, dynamic capabilities, and leadership. *California Management Review*, *61*(1), 15-42. https://doi.org/10.1177%2F0008125618790246

Schoenthaler, F. (2019). *Successful in the digitalized world of VUCA: Agility and breathing supply chains*: Promantis Group.

Sekaran, U., & Bougie, R. (2020). *Research methods for business: A skill building approach* (8th ed.). Hoboken: Wiley.

Techedge. (2020). *The challenges of today's automotive industry*. Retrieved from https://www.techedgegroup.com/blog/automotive-industry-challenges

Teece, D., Peteraf, M., & Leih, S. (2016). Dynamic capabilities and organizational agility: Risk, uncertainty, and strategy in the innovation economy. *California Management Review*, *58*(4), 13-35. https://doi.org/10.1525/cmr.2016.58.4.13

Teece, D. J. (2012). Dynamic capabilities: Routines versus entrepreneurial action. *Journal of Management Studies*, *49*(8), 1395-1401. https://doi.org/10.1111/j.1467-6486.2012.01080.x

Teece, D. J. (2014). The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *Academy of Management Perspectives*, *28*(4), 328-352. https://doi.org/10.5465/amp.2013.0116

Torres, R., Sidorova, A., & Jones, M. C. (2018). Enabling firm performance through business intelligence and analytics: A dynamic capabilities perspective. *Information & Management*, *55*(7), 822-839. https://doi.org/10.1016/j.im.2018.03.010

Ulrich, D. (2018). *Got meaning? Moving beyond just an experience to a meaningful experience.* Retrieved from www.linkedin.com/pulse/finding-meaning-mundane-dave-ulrich/

Umam, R., & Sommanawat, K. (2019). Strategic flexibility, manufacturing flexibility, and firm performance under the presence of an agile supply chain: A case of strategic management in fashion industry. *Polish Journal of Management Studies*, *19*(2), 407-418. https://doi.org/10.17512/pjms.2019.19.2.35

Vaillant, Y., & Lafuente, E. (2019). The increased international propensity of serial entrepreneurs demonstrating ambidextrous strategic agility: A precursor to international marketing agility. *International Marketing Review*, *36*(2), 239-259. https://doi.org/10.1108/imr-01-2018-0015

Vasuvanich, S., Somjai, S., Rattamanee, K., & Jermsittiparsert, K. (2020). The role of big data analytics in determine the relationship between green product innovation, market demand and the performance of motorcycle manufacturing firms in Thailand. *International Journal of Supply Chain Management*, *9*(1), 37-45.

© 2023 AESS Publications. All Rights Reserved.

Wang, C. L., Senaratne, C., & Rafiq, M. (2015). Success traps, dynamic capabilities and firm performance. *British Journal of Management*, *26*(1), 26-44. https://doi.org/10.1111/1467-8551.12066

Wheelen, T. L., & Hunger, J. D. (2018). *Concepts in strategic management and business policy: Globalization, innovation and sustainability* (15th ed.). London: Pearson Education Limited.

Wijaya, T. (2022). *Throughout 2021, AHM's motorcycle exports nearly reached 1 Million units*. Retrieved from https://otomotif.bisnis.com/read/20220121/273/1491629/sepanjang-2021-ekspor-sepeda-motor-ahm-hampir-capai-1-juta-unit

Wilden, R., Gudergan, S. P., Nielsen, B. B., & Lings, I. (2013). Dynamic capabilities and performance: Strategy, structure and environment. *Long Range Planning*, *46*(1-2), 72-96. https://doi.org/10.1016/j.lrp.2012.12.001

Witcher, B. J. (2020). *Absolute essentials of strategic management*. New York: Routledge.

Yu, W., Chavez, R., Jacobs, M. A., & Feng, M. (2018). Data-driven supply chain capabilities and performance: A resource-based view. *Transportation Research Part E: Logistics and Transportation Review*, *114*, 371-385. https://doi.org/10.1016/j.tre.2017.04.002

Zhou, S. S., Zhou, A. J., Feng, J., & Jiang, S. (2019). Dynamic capabilities and organizational performance: The mediating role of innovation. *Journal of Management & Organization*, *25*(5), 731-747. https://doi.org/10.1017/jmo.2017.20

Views and opinions expressed in this article are the views and opinions of the author(s). Asian Economic and Financial Review shall not be responsible or answerable for any loss, damage, or liability, etc. caused in relation to/arising from the use of the content.

© 2023 AESS Publications. All Rights Reserved.