

## INNOVATION, COMPETITIVE STRATEGY AND MSME PERFORMANCE: A SURVEY STUDY ON CULINARY SMES IN INDONESIA DURING THE COVID-19 PANDEMIC

Cancelyn Shearin PUSUNG<sup>1</sup>, Niluh Putu Dian Rosalina Handayani NARSA<sup>1\*</sup>, Oktaviani Ari WARDHANINGRUM<sup>2</sup>

<sup>1</sup>*Department of Accounting, Faculty of Economic and Business, Universitas Airlangga, Surabaya, Indonesia*

<sup>2</sup>*Department of Accounting, Faculty of Economic and Business, Universitas Jember, Jember, Indonesia*

Received 14 March 2022; accepted 3 February 2023

**Abstract.** The aim of this research is to examine the relationship between innovation and performance in culinary sector MSME in Indonesia. This research also examines the mediating role of competitive strategies on the correlation of innovation in SME performance. This study proceeds using a quantitative approach and Partial Least Square (PLS) through SmartPLS software. The sample of this study consisted of 201 SMEs in Indonesia (specially in Surabaya) that engage in the food and beverage (culinary) sector, and the researcher used an accidental sampling technique to collect data. The result revealed that process innovation was directly, positively, and significantly related to the performance of SMEs. Furthermore, the analysis found that competitive strategies, including cost leadership, differentiation, and focus, mediated a partial relationship between innovation and SME performance and had a full mediation of innovation in SME performance. This study shows that SMEs with process innovation can more easily achieve superior performance than SMEs which implement product-oriented innovation. This research focused on SMEs in Surabaya, so it is necessary to be careful in generalizing the results to other locations or business sectors.

**Keywords:** competitive strategies, innovation, SMEs, SMEs performance.

**JEL Classification:** M41, O30.

### Introduction

The ongoing COVID-19 pandemic has become an issue that requires special attention and has placed the world in a state of health emergency (Khan et al., 2020). The World Health Organization (WHO) has categorized COVID-19 as a pandemic because this outbreak has an alarming level of spread and severity. As a pandemic, COVID-19 may have a negative impact if it is not addressed immediately. This epidemic poses a threat not only to the health sector but also to the international economy (Yashavantha Rao & Jayabaskaran, 2020). Several countries have launched a fiscal response both to minimize the spread of COVID-19 and to maintain the income of companies and workers until the economy recovers (Susskind & Vines, 2020).

The current slowdown in the global economy has an impact on Indonesia's economic growth (Nasution et al., 2020). There are various factors that influence Indonesia's economic growth, one of which is the role of business

actors. Among the various types of business actors, micro, small and medium enterprises, hereafter referred to as SMEs, have contributed to efforts to improve the Indonesian economy. They contribute to economic growth and equitable development (Tjahjadi et al., 2020). Based on data from the Central Statistics Agency (Indonesian Central Bureau of Statistics, 2020), 33.23% of SMEs and 46.64% of SMEs have reduced their number of employees in the midst of the pandemic, and 84.20% of SMEs and 82.29% of SMEs experienced a decrease in income. A total of 62.21% of SMEs and 53.17% of SMEs have faced financial constraints related to employees and operations. Finally, seven out of every ten SMEs urgently need business capital assistance during the pandemic. Based on this data, it is understood that the COVID-19 pandemic, which has impacted the Indonesian economy, has resulted in the declining performance of SMEs as one of the drivers of Indonesian economic decline; some SMEs have even had to close their businesses due to the lack of capital and lack of income.

\*Corresponding author. E-mail: [niluh.narsa@feb.unair.ac.id](mailto:niluh.narsa@feb.unair.ac.id)

The performance of an organization is determined by its strategy. Furthermore, there are factors that affect the framework used to classify the current strategies (Linton & Kask, 2017). According to Linton and Kask (2017), having a competitive advantage is a solution for organizations in their efforts to achieve high performance. In SMEs, the concept of competitive strategy refers to achieving superior performance by using the resources and capabilities of the organization (Na et al., 2019). Competitive strategy helps SMEs to be able to survive amidst an economic crisis (Ulubeyli et al., 2018). It is important for SMEs to obtain, maintain, and increase competitive superiority through the internal resources and external resources possessed (Eniola & Ektebang, 2014).

In an effort to achieve competitive superiority and organizational efforts in encouraging superior growth, organizations need to implement innovative strategy (Rua et al., 2018). Innovation is important when dealing with various situations in the market and in an organization's efforts to maintain its competitive advantage (Qosasi et al., 2019). Competitive advantage management plays a role in the operational success of SMEs; therefore, SMEs must try to develop innovations, such as new products or services, based on customer needs and possess the ability to understand competitors' business patterns (Siriwan et al., 2013).

Innovation is an important concern for every business owner, especially for those who are just starting their business. Therefore, this study took a sample of SMEs in the food and beverage sector in Surabaya. According to Sulistyono and Ayuni (2020), it is very important for SMEs to improve their entrepreneurial orientation; one such orientation is innovation, which is useful for renewing established businesses and increasing competitiveness in the market. However, one of the weaknesses of SMEs is the courage to innovate and take risks. In addition to the importance of innovation to the competitive advantage and performance of SMEs, the essential role of SMEs in economic growth in Indonesia is a factor in choosing SMEs as research objects (Koentjoro & Gunawan, 2020; Kurniati et al., 2019; Lestari et al., 2020; Styaningrum et al., 2020).

Previous research conducted by Rosli and Sidek (2013) found that product innovation and process innovation are related to the performance of SMEs. Theoretically, those who innovate have better performance. Seo and Chae's (2016) research results stated that innovation has an impact on performance with regard to the diversity and market dynamics of SMEs. SMEs with a high level of diversity have the potential to achieve high levels of innovation, leading to superior SME performance. When market dynamics are high, innovative activities play an important role in contributing to SME performance. This data supports the results of previous research related to improving the performance of SMEs. The creation of innovation is better focused by examining the development of consumer tastes and technological developments related to product development and marketing (Novia et al., 2020). Other research conducted by Herlinawati and Machmud (2020) found that innovation is positively related to SME

performance. A low level of innovation results in the low performance of SMEs. If the cause is left unexplored, it will hamper the development of SMEs. In other words, SMEs actors must continuously improve indicators that are tied to low innovation in SMEs.

However, some research results contradict the studies above. Research conducted by Ho et al. (2010) showed that the reduction of manpower and work procedures, internal operations, and external management systems play a role in the financial performance of SMEs amidst a crisis. Other conflicting results exist in the research of Harwiki and Malet (2020), who found that innovation had no impact on the performance of SMEs. This is due to the difficulty SMEs face in accessing bank loans or other funding mechanisms to launch new products and services.

The inconsistent results of the relationship between innovation and the performance of SMEs in previous studies motivate this study to utilize competitive strategy as a mediator. Based on research by Ulubeyli et al. (2018), competitive strategies such as cost leadership, differentiation, and focus are related to the performance of SMEs. In addition, competitive strategy mediates the relationship between innovation and SME performance. Naidoo (2010) found a relationship between innovation and performance through the ability of SMEs to possess and develop competitive advantages. Thus, the purpose of this study is to examine the relationship between innovation and the performance of SMEs with competitive strategy as a mediating variable. The variables in this study are more relevant to study at this time, considering the declining economic situation as a result of the COVID-19 pandemic in Indonesia. SMEs in the food and beverage sector were selected because this field is one of the majorities of the fields that SME actors are involved in. In the midst of a pandemic, the culinary field is still quite able to survive because food and drink are primary needs (Ginanjari, 2020). In addition, Surabaya's enormous economic potential, both in terms of location and economy, is greatly influenced by its very complete infrastructure (Istifadah et al., 2018; Narsa et al., 2021).

## 1. Theory basis and hypothesis development

### *Innovation*

There are various indicators used in measuring innovation (Narsa, 2018; Herlinawati & Machmud, 2020; Noor et al., 2019; Novia et al., 2020). Among the many indicators, product innovation and process innovation are the types that are most often used in the study of innovation in SMEs (Umar et al., 2018). Al-Sa'di et al. (2017) stated that product innovation is defined as improvements to the product mix, product selection, and development in organizations that are considered new. According to Noor et al. (2019), process innovation includes the creation or improvement of methods of production, service, or administrative operations, as well as the development of processes, systems, and engineering activities employed in the development of new products.

### *Competitive strategy*

In dealing with industry pressures, there are three generic strategies with the potential to be successful for outperforming competitors (Porter, 1980): cost leadership, differentiation, and focus. For companies that adopt a cost leadership strategy, the goal is to increase market share by implementing lower costs than competitors (Banker et al., 2014). Differentiation can be based on the product itself, the delivery system used to sell the product, the marketing approach, and various other factors (Porter, 1985). The focus strategy aims to serve a narrow market segment and outperform competitors that operate more broadly.

### *SME performance*

The performance of SMEs consists of two dimensions: financial performance and non-financial performance. The two dimensions in this study were measured as a single unit. According to Bianchi et al. (2015), measurements of performance must consist of financial and non-financial perspectives. The financial dimension supports the company to increase profitability through investment, while the non-financial dimension ensures the stability of the company's position in the future. Uniting the two dimensions into one construct was also carried out in previous research (Kotane & Kuzmina-Merlino, 2017; Styaningrum et al., 2020; Umar et al., 2018). In general, financial performance indicators are a set of variables that can usually indicate the company's ability to generate profits (Al-Mamary et al., 2020). Meanwhile, non-financial performance, according to Choongo (2017), is based on the company's image, reputation, quality of human resources, customer base, adherence to brand defense, and investment in research and development.

### *The relationship of innovation to SME performance*

The rapidly changing business environment makes innovation an important strategy in ensuring the sustainability of an organization. The importance of the role of innovation requires organizations to continually seek new ideas so as to continue to improve performance (Ismail et al., 2019). Innovation here is not only a big change in technology; innovation can also be represented as the discovery of new products, opening new markets, and so on. According to Rosli and Sidek (2013), organizations must pay attention to consumer behavior when implementing innovations. Organizations must be able to predict consumers' preferences, perceptions, and satisfaction. Furthermore, organizations must be able to influence perceptions and understand market needs and wants so that their products are seen as having superior value in the eyes of existing and potential consumers. In addition, organizations should focus on developing technology in their processes as well as in marketing their products (Novia et al., 2020). According to Seo and Chae (2016), innovation is based on market dynamics. When market dynamics are high, innovative activities play a significant role in contributing to performance disclosure after a certain period of time has passed.

Product innovation is one source of competitiveness for SMEs that can be applied to improve SME performance and competitiveness (Rosli & Sidek, 2013). Product innovation can lead to patent protection, which is very important for innovation in SMEs (Laforet, 2011). Thus, product innovation can allow SMEs to achieve superior performance through the uniqueness of their products. Process innovation is intended to lower the unit costs of production or delivery, improve quality, and either produce new products or improve existing products. Process innovation is very important for SMEs that face high levels of competition (Kiveu et al., 2019). Thus, continuous process changes to achieve production effectiveness cause SMEs to perform better than their competitors.

It is very important for SMEs to innovate, especially in terms of introducing new products and updating their processes to improve their performance (Hafeez et al., 2013). Previous research found that innovation is closely related to the successful performance of SMEs. Product innovation and process innovation are positively related to SME performance (Ar & Baki, 2011; Hilmi et al., 2010; Umar et al., 2018; Al-Sa'di et al., 2017). In addition, product innovation and process innovation, combined with marketing innovation and/or organizational innovation, are positively related to SME performance (Hafeez et al., 2013; Kiveu et al., 2019; Noor et al., 2019). Therefore, it can be concluded that the hypothesis is as follows:

H1a: Product innovation is positively related to SME performance.

H1b: Process innovation is positively related to SME performance.

### *Cost leadership as a mediator on the relationship between innovation and SME performance*

One strategy that is widely used in business and empirical research is the competitive strategy proposed by Porter (1985). In the competitive strategy, there are three generic strategies that aim to outperform competitors: cost leadership strategy, differentiation strategy, and focus strategy. Overall, competitive strategy is positively related to organizational performance. There are several previous studies that used competitive strategy as a mediating variable in business performance research, one of which explored the effects of innovation on SME performance (Naidoo, 2010; Rosli & Sidek, 2013; Ulubeyli et al., 2018). According to Ulubeyli et al. (2018), SMEs that can achieve a match between innovation and competitive strategy are able to survive. The ability to survive is in line with the performance to be achieved by SMEs. When SMEs are able to maintain their business continuity even in the midst of uncertain macroeconomic conditions, this indicates that they are performing well. According to Na et al. (2019), to increase their sustainable competitive advantage, SMEs must actively present innovative new product ideas, respond quickly to market demands, and promote innovation oriented to consumer-centric pricing policies.



When SMEs use consumer behavior as a source of information in formulating innovations, SMEs can understand the factors behind the products being sold that are acceptable to consumers. According to Na et al. (2019), consumers will choose innovative products that provide perceived relative advantages, economic feasibility, enjoyment, reliability, ease of use, observability, and cost advantages. Consequently, SMEs must focus on innovation activities that have cost advantages that allow them to achieve cost leadership. Cost leadership is regarded as a strong and sustainable basis for allowing SMEs to outperform competitors (Ulubeyli et al., 2018). Naidoo (2010) argued that if SMEs implement a cost leadership strategy, they should be able to reduce their relative costs by comparing them to similar businesses in the market. Furthermore, SMEs can implement a cost leadership strategy through process innovation because both strategies aim to increase operational effectiveness, which has an effect on decreasing the relative cost of business.

Thus, the cost leadership strategy as one element of the competitive strategy mediates the relationship between product innovation and process innovation with regard to SME performance (Ulubeyli et al., 2018). This conclusion is supported by empirical evidence that shows a positive relationship between innovation and the performance of SMEs with a competitive strategy as a mediation (Rosli & Sidek, 2013; Rua et al., 2018). Therefore, the hypotheses are as follows:

H2a: The cost leadership strategy positively mediates the relationship between product innovation and SME performance.

H2b: The cost leadership strategy positively mediates the relationship between process innovation and SME performance.

#### *Differentiation as a mediator on the relationship between innovation and SME performance*

According to Naidoo (2010), in addition to employing a cost leadership strategy, SMEs are more likely to survive if they develop and sustain competitive advantages and innovations based on differentiation strategies. Differentiation means meeting customer needs in a unique way based on speed, customer service, and flexibility, which is consistent with the innovative approach and the characteristics of SME actors (Rua et al., 2018). In other words, the differentiation strategy provides uniqueness to SMEs that implement it. With the uniqueness that SMEs possess, they can maintain their position in the market. SMEs that cannot differentiate their businesses tend to be more vulnerable in facing competitors and produce suboptimal performance. Ulubeyli et al. (2018) showed that SMEs can gain a competitive advantage from differentiation through their innovations.

Thus, differentiation strategy as an element of competitive strategy mediates the relationship between product innovation and process innovation regarding SME

performance (Ulubeyli et al., 2018). This conclusion is supported by empirical evidence that shows a positive relationship between innovation and the performance of SMEs that use a competitive strategy as a mediation (Rosli & Sidek, 2013; Rua et al., 2018). Therefore, the hypotheses are as follows:

H3a: Differentiation strategy positively mediates the relationship between product innovation and SME performance.

H3b: Differentiation strategy positively mediates the relationship between process innovation and SME performance.

#### *Focus as a mediator on the relationship between innovation and SME performance*

The effects of market uncertainty can be minimized by focusing on creating strategies that are oriented to specific consumer needs. The focus strategy is one part of the competitive strategy that can lead an organization to achieve strong performance. Similar to cost leadership and differentiation strategies, if the focus strategy is implemented properly, it can lead SMEs to achieve a competitive advantage. What distinguishes the focus strategy from other strategies is that it only serves a narrowly selected market segment in an effort to outperform competing companies that operate more broadly (Naidoo, 2010). Achieving performance through a focus strategy can increase market share by operating in a narrow market or niche segment more efficiently than larger competitors (Ulubeyli et al., 2018). However, the focus strategy cannot run optimally when faced with marketing innovations. Marketing innovation targets a broad market, whereas a focused strategy tries to meet the needs of a narrower market. Therefore, the weakness of the relationship between focus strategy and marketing innovation has an impact on increasing the relationship between focus strategy and product and process innovation due to the reduction of other factors related to achieving competitive advantage.

Thus, the focus strategy as one element of the competitive strategy mediates the relationship between product innovation and process innovation with SME performance (Ulubeyli et al., 2018). This conclusion is supported by empirical evidence that shows a positive relationship between innovation and the performance of SMEs with a competitive strategy as a mediation (Rosli & Sidek, 2013; Rua et al., 2018). Therefore, the hypotheses are as follows:

H4a: Focus strategy positively mediates the relationship between product innovation and SME performance.

H4b: Focus strategy positively mediates the relationship between process innovation and SME performance.

## **2. Research method**

### *Data collection*

This research used a survey research method, and the research design used is quantitative research. The survey

method is considered adequate for the purpose of measuring the correlation between variables (Siyoto & Sodik, 2015, p. 22). The survey was conducted to examine the role of competitive strategies in mediating the relationship between innovation and the performance of SMEs in Surabaya. The 5-Point Likert scale has been used in this study because it can generate a strong index of reliability and validity (Roy, 2020). The respondent criteria determined by the researcher included the following:

1. The business is engaged in the culinary field.
2. The business is located in Surabaya.
3. If there is no place of business (the business is run online), the business owner's domicile is in Surabaya.

#### *Variables and variable operational definitions*

This study used the dependent variable (Y) to represent the performance of SMEs. The independent variables were product innovation (X1) and process innovation (X2), with a competitive strategy consisting of cost leadership (Z1), differentiation (Z2), and focus (Z3) as mediation variables. The following is the operational definition used as the basis for the variables used and then tested in the next discussion chapter.

##### 1. Product Innovation (X1)

The product innovation measurement instruments were based on research by Hilmi et al. (2010). There was a total of four questions related to how innovative products compared to competitors, whether the product was something new in the market, and the success rate of the product introduction. All of these indicators are considered by researchers to be sufficient in measuring product innovation.

##### 2. Process Innovation (X2)

The process innovation measurement instrument was based on Hilmi et al. (2010), with a total of four questions related to business processes, management approaches, methods used by SMEs, and the ability of SMEs to continuously update production methods. All of these indicators are considered by researchers to be sufficient in measuring process innovation.

##### 3. Cost Leadership (Z1)

The competitive strategy measurement instrument was prepared according to Naidoo (2010) with a number of indicators as many as five questions about suppressing costs in business activities, minimizing costs by changing production processes, and setting prices lower than competitors.

##### 4. Differentiation (Z2)

The differentiation strategy measurement instrument was prepared in accordance with Naidoo's research (2010), with four indicators totaling four questions about the speed of the business in marketing new products, the business advantages in implementing promotion and pricing strategies, and the ability of the business to differentiate itself from competitors through product quality.

##### 5. Focus (Z3)

The focus strategy measurement instrument was prepared in accordance with Naidoo's research (2010), with a total of four indicators regarding the production of a limited number of products and a specific target market with a limited number of products sold.

##### 6. SME Performance (Y)

MSME performance measurement instruments are prepared according to research by R. Khan et al. (2020), with a total indicator of ten questions about employee performance, the success rate of product introductions, the ability to innovate in technology, and the impact of the existence of SMEs on the surrounding environment.

#### *Data analysis*

The data in this study was measured using the SmartPLS (Partial Least Square) software. The choice of SmartPLS was made because the software can process data that does not have to be normally distributed, it can process with a small sample coverage, and it can analyze as well as constructs compiled by researchers. Analysis using SmartPLS is divided into two models, the measurement model (outer model) and the structural model (inner model). The outer model defines how each indicator relates to its latent variable. The measurement model in PLS is divided into the reflective model and the formative model. The outer model in this study refers to Ghozali's outer model (Ghozali, 2014, pp. 45–50). Through the outer model, the validity is tested with convergent validity, average variance extracted (AVE), and discriminant validity. In addition, the reliability of the data is tested through composite reliability and Cronbach's alpha. The second stage is testing the inner model. The evaluation of the inner model aims to predict and describe the relationship between exogenous latent variables (independent variables) and endogenous latent variables (dependent variables). Evaluation of the structural model is explained by R-squared, predictive relevance for endogenous variables and also examines the structural path coefficients. The value of predictive relevance if more than 0 (zero) indicates that the model is able to predict the latent variable construct and vice versa.

### **3. Results and discussion**

#### *Description of SMEs respondents*

The selection of respondents in this study was based on accidental sampling and was conducted online and offline with a total of 392 respondents. Nevertheless, the total respondents that filled out the questionnaire correctly and can be processed for further statistical test is about 201 questionnaires which can be seen on Table 1. Furthermore, Table 2 depicts the data regarding respondents' demography. Survey methods allow for non-response bias and general method bias. To avoid non-response bias from the data collected, the researchers distributed questionnaires

directly and via Whatsapp using numbers obtained from the Micro Business Office and the Trade Office. Furthermore, to overcome the bias of the general method, the researcher conducted ex-ante and ex-post questionnaires. This is done to minimize question items that are not understood by respondents. As Sande and Ghosh (2018) stated, endogeneity is also considered a crucial issue in survey-based research. To overcome the problem of endogeneity, this study examined additional separate tests of demographic variables (gender, age, highest level of education, years of service, number of employees) on the dependent variable. The results showed that gender is related to performance ( $df = 322, n = 201$ ; Pearson Chi-Square =

Table 1. Description of questionnaire data collection

Note	Total of Questionnaire	Percentage of Total Questionnaire
Questionnaire distributed	392	100%
Questionnaire not returned	168	42.86%
Questionnaire filled out incorrectly	23	5.87%
Questionnaire is filled out correctly and processed	201	51.28%

Table 2. Respondents' demography

	Frequency (Total)	Percentage (%)
<b>Age</b>		
21–30 years	44	21.9
31–40 years	49	24.4
41–50 years	68	33.8
>50 years	40	19.9
Total	201	100
<b>Gender</b>		
Female	149	74.1
Male	52	25.9
Total	201	100
<b>Latest education</b>		
Elementary	10	4.9
Junior high	17	8.5
High school/Vocational	93	46.2
Diploma	27	13.4
Bachelor	54	26.8
Total	201	100
<b>Length of Period the SME Established</b>		
<3 Years	51	25.4
3–5 Years	65	32.3
5–10 Years	61	30.3
>10 years	24	11.9
Total	201	100
<b>Total number of employees</b>		
No employees	61	30.3
1–4 people	136	67.7
5–19 people	4	2
20–99 people	0	0
Total	201	100

425.86;  $p < 0.001$ ). Robb and Watson (2012) stated that men and women business actors exhibit differences in their management styles, such as differences in attitudes, behavior, biological, and cultural patterns, as well as psychological differences. This is a signal for researchers to be cautious in generalizing the findings, especially for further research, if gender is analyzed as a demographic variable.

Data analysis

Based on the results of data processing with Partial Least Square (PLS) software through the smartPLS program, a path diagram is produced which shows the overall relationship between the indicators and the variables being measured which can be seen in Figure 1. In addition, it shows a direct relationship between the variables of product innovation and process innovation with MSME performance and an indirect relationship through the mediating variables of cost leadership, differentiation and focus.

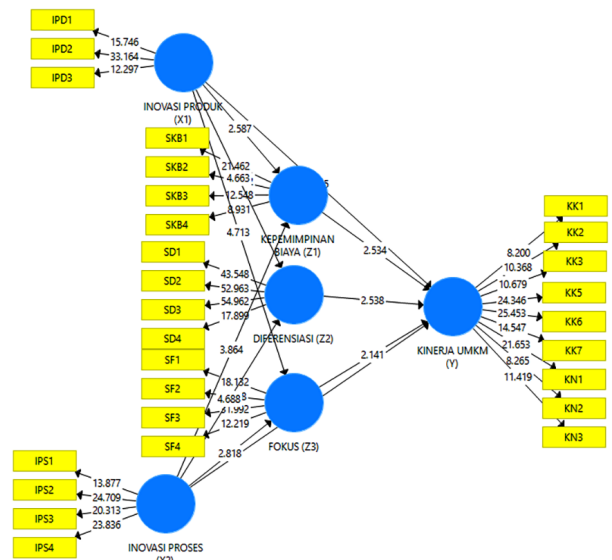


Figure 1. PLS structure model

Prior to testing the hypothesis, the results of the outer loadings, AVE, cross-loading, composite reliability, Cronbach alpha, and r-squared values, respectively, can be seen starting from Table 3 to Table 6. All of these tests have met the requirements of each test except for the outer loadings values of IPD 4, KN4, and SKB5, which must then be eliminated. Thus, the researcher has obtained adequate confidence that the convergent and discriminant validity of all the indicators used in this study are feasible to enter the next stage of testing.

Hypothesis testing in this study focused on the following: whether the relationship between two variables was positive or negative and the level of significance. In addition, the indirect relationship can be seen in the total indirect effect. Based on the PLS test, it was found that H1a was not supported, while H1b, H2a, H2b, H3a, H3b, H4a, and H4b were supported. Table 7 shows that the value of the product innovation variable with SME performance was 0.855, with a p-value of 0.393. This indicates that product

Table 3. The value of *Outer Loadings*

	Product Innovation (X1)	Process Innovation (X2)	Cost Leadership (Z1)	Differentiation (Z2)	Focus (Z3)	Finacial Performance (Y)
IPD1	0.767					
IPD2	0.842					
IPD3	0.751					
IPD4	0.120					
IPS1		0.758				
IPS2		0.809				
IPS3		0.796				
IPS4		0.818				
KB1			0.764			
KB2			0.775			
KB3			0.705			
KB4			0.607			
KB5			0.602			
SD1				0.860		
SD2				0.690		
SD3				0.900		
SD4				0.705		
SF1					0.796	
SF2					0.558	
SF3					0.847	
SF4					0.744	
KN1						0.677
KN2						0.692
KN3						0.702
KN4						0.485
KN5						0.786
KN6						0.761
KN7						0.672
KN8						0.784
KN9						0.645
KN10						0.729

Table 4. The value of AVE

	AVE ( <i>Average Variance Extracted</i> )
Product Innovation (X1)	0.622
Process Innovation (X2)	0.633
Cost Leadership (Z1)	0.537
Differentiation (Z2)	0.710
Focus (Z3)	0.553
SMEs Performance (Y)	0.519

Table 5. Cross loading value

	Product Innovation (X1)	Process Innovation (X2)	Cost Leadership (Z1)	Differentiation (Z2)	Focus (Z3)	SMEs Performance (Y)
IPD1	0.773	0.318	0.293	0.376	0.295	0.283
IPD2	0.847	0.416	0.278	0.456	0.379	0.331

End of Table 5

	Product Innovation (X1)	Process Innovation (X2)	Cost Leadership (Z1)	Differentiation (Z2)	Focus (Z3)	SMEs Performance (Y)
IPD3	0.742	0.365	0.252	0.344	0.353	0.260
IPS1	0.262	0.759	0.254	0.309	0.214	0.224
IPS2	0.371	0.808	0.315	0.433	0.366	0.363
IPS3	0.366	0.798	0.347	0.317	0.252	0.355
IPS4	0.452	0.817	0.330	0.503	0.320	0.388
KB1	0.382	0.350	0.801	0.307	0.274	0.253
KB2	0.331	0.213	0.764	0.303	0.255	0.229
KB3	0.111	0.324	0.735	0.304	0.269	0.351
KB4	0.183	0.250	0.617	0.199	0.200	0.301
SD1	0.522	0.426	0.275	0.859	0.430	0.386
SD2	0.455	0.260	0.349	0.889	0.432	0.386
SD3	0.385	0.454	0.302	0.900	0.357	0.381
SD4	0.305	0.350	0.373	0.708	0.404	0.415
SF1	0.423	0.274	0.200	0.386	0.801	0.313
SF2	0.119	0.086	0.334	0.126	0.554	0.118
SF3	0.388	0.403	0.274	0.478	0.845	0.414
SF4	0.237	0.213	0.321	0.302	0.740	0.254
KN1	0.121	0.222	0.203	0.232	0.235	0.676
KN2	0.131	0.236	0.267	0.236	0.179	0.686
KN3	0.133	0.278	0.242	0.226	0.171	0.692
KN5	0.349	0.409	0.339	0.426	0.358	0.796
KN6	0.385	0.401	0.359	0.434	0.397	0.771
KN7	0.318	0.361	0.308	0.363	0.364	0.680
KN8	0.324	0.303	0.291	0.380	0.321	0.794
KN9	0.224	0.112	0.199	0.313	0.244	0.637
KN10	0.252	0.316	0.219	0.265	0.240	0.733

Table 6. The value of Composite Reliability, Cronbach's Alpha, and R-Squared

	Composite Reliability	Cronbach's Alpha	R-Squared
Product Innovation (X1)	0.831	0.695	0.344
Process Innovation (X2)	0.873	0.809	0.225
Cost Leadership (Z1)	0.821	0.708	0.190
Differentiation (Z2)	0.907	0.860	0.321
Focus (Z3)	0.829	0.747	
SMEs Performance (Y)	0.906	0.886	

innovation is not related to the performance of SMEs, and H1a was therefore not supported. However, the value of the relationship between the process innovation variable and the performance of SMEs was 1.192 with a p-value of 0.047, and therefore H1b was supported. With regard to the relationship between innovation and competitive strategy, product innovation was positively related to cost leadership strategy, differentiation, and focus, with the highest relationship between product innovation and focus strategy (4.713, with a significance level of 0.000). Similar to product innovation, process innovation was positively related to all competitive strategy variables. The strongest

relationship was found between process innovation and differentiation strategy, at 4.688, with a significance level of 0.000. Finally, the relationship between cost leadership strategies, differentiation, and focus was positively related to SME performance. The differentiation strategy had the strongest relationship with the performance of SMEs, with a value of 2.538 and a p-value of 0.011, or 1.1%.

Based on Table 8, the variables of cost leadership, differentiation, and focus mediate the relationship between product innovation and process innovation with SME performance with values of 3.528 and 4.086, respectively, and a p-value of 0.000. This indicates that H2a, H2b, H3a,



Table 7. The value of *Path Coefficient* and *p-value* (Direct Relationship)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	p-Values
Product Innovation (X1) -> SMEs Performance (Y)	0.061	0.060	0.072	0.855	0.393
Process Innovation (X2) -> SMEs Performance (Y)	0.171	0.171	0.086	1.192	0.047
Product Innovation (X1)-> Cost Leadership (Z1)	0.209	0.204	0.081	2.387	0.010
Process Innovation (X2)-> Cost Leadership (Z1)	0.298	0.307	0.077	3.864	0.000
Product Innovation (X1)-> Differentiation (Z2)	0.339	0.349	0.073	4.663	0.000
Process Innovation (X2)-> Differentiation (Z2)	0.346	0.350	0.074	4.688	0.000
Product Innovation (X1) -> Focus (Z3)	0.335	0.346	0.071	4.713	0.000
Process Innovation (X2) -> Focus (Z3)	0.215	0.220	0.076	2.818	0.005
Cost Leadership (Z1) -> SMEs Performance (Y)	0.164	0.164	0.065	2.534	0.012
Differentiation (Z2) -> SMEs Performance (Y)	0.206	0.223	0.081	2.538	0.011
Focus (Z3) -> SMEs Performance (Y)	0.162	0.156	0.076	2.141	0.033

Table 8. Total value of *Indirect Effect* (Indirect Relationship)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	p-Values
Product Innovation (X1) -> SMEs Performance (Y)	0.159	0.166	0.045	3.528	0.000
Process Innovation (X2) -> SMEs Performance (Y)	0.155	0.161	0.038	4.086	0.000

H3b, H4a, and H4b are supported. Thus, the competitive strategy fully mediates the relationship between product innovation variables and SME performance. Furthermore, competitive strategy through the variables of cost leadership, differentiation, and focus separately or partially mediates the relationship between process innovation and SME performance in Surabaya.

#### 4. Discussion

Contingency theory focuses on contextual variables outside the control of the organization, one of which is the external environment that can affect the performance of an organization. One of the current external environmental conditions whose impact is felt by almost all economic sectors is the COVID-19 pandemic. In the midst of the COVID-19 pandemic, innovation has an important role in allowing businesses to survive. Innovation from various perspectives was found to be positively related to SME performance, including product innovation and process innovation. Preparation and implementation of efficient product and process innovations provide greater possibilities for SMEs to survive.

The unsupported H1a is in line with research conducted by Hilmi et al. (2010) and Kiveu et al. (2019). Through product innovation, SMEs can improve their performance; however, this performance improvement does not guarantee that SMEs can survive. This is because changes in products do not necessarily bring SMEs to superior performance. In other words, producing new products does not always lead to improvements for SMEs, as well

as innovation in the existing product mix. This finding is also in line with research results conducted by Kiveu et al. (2019), who underscores the role of product innovation in spurring organizational growth and argues that competition from new products far outweighs the marginal variation in the prices of existing products. However, support for H1b is in line with research conducted by Ar and Baki (2011), Umar et al. (2018), and Al-Sa'di et al. (2017). Process innovation that is closely related to operational and distribution reforms in order to gain efficiency allows SMEs to obtain superior performance. Furthermore, efficiency makes it easier for SMEs to maintain their sustainability in the midst of a macroeconomic downturn. This is also in line with the research of Hilmi et al. (2010), which examined SMEs in Malaysia, where process innovation was positively related to SME performance.

Furthermore, regarding the results of indirect testing, where competitive strategy acted as a mediating variable, it was found that all hypotheses from H2a to H4d were supported. For a cost leadership strategy, both product innovation and process innovation can improve the performance of SMEs if they are cost leadership-oriented. The cost leadership strategy allows the SME business to continue to generate sales because during the pandemic, people's income levels have relatively decreased, thus certainly, selling food products at relatively lower prices will attract consumers (Sinurat et al., 2021). Business actors who implement product innovation can generate ideas for new or existing products that make the product cost below the market average for similar products. Process innovation has allowed SMEs to be more efficient. Furthermore,

efficiency in SMEs can reduce the costs that must be incurred in operations and distribution. One way to achieve operational efficiency is through the production process. With efficiency, SMEs do not need a long time to produce a product. This outcome can be achieved by speeding up the production process by investing in production machines. Efficiency in distribution is found through the accuracy and speed at which goods are delivered to consumers. In this way, cost leadership-oriented process innovation can improve SME performance. These results support the research of Naidoo (2010), who stated that through cost leadership, SMEs can achieve better performance than their competitors. Thus, the results of this study support the results of previous studies (Na et al., 2019; Naidoo, 2010; Rosli & Sidek, 2013; Rua et al., 2018; Ulubeyli et al., 2018).

Moreover, by utilizing a differentiation strategy from various aspects, SMEs can obtain superior performance even in the midst of a pandemic. In this study, it was found that differentiation through product uniqueness was positively related to SME performance. In this way, SMEs that apply differentiation strategies appropriately can improve their performance (Rosli & Sidek, 2013; Rua et al., 2018). Businesses that innovate products aspire to be different from similar products on the market. Through being different, the product is expected to be able to attract consumer interest. In addition, the differentiation of new or existing products has made it easier to brand SMEs in the market. Process innovation can help SMEs, by implementing a differentiation strategy, to achieve uniqueness in operations or distribution that distinguishes them from other competitors (Na et al., 2019; Naidoo, 2010). The focus strategy means that through a smaller market niche, business actors can easily determine their product innovation because consumer demand is not diverse. Furthermore, the frequency of sales will continue to increase and lead to an increase in the performance of SMEs. Thus, product innovation oriented to a focused strategy, including process innovations carried out by SMEs, can provide superior performance. The diversity of needs makes it easier for SMEs to adjust their operations to the distribution of their products. Thus, specific managerial and technical capacities enhanced through innovation enable SMEs to focus on narrowly defined and specific market segments. In other words, the diversity in certain markets makes it easier for SMEs to determine the right process for both production and distribution for their business. As also found by Mujanah et al. (2022) that critical thinking and creativity proved to be very important for SMEs to enhance their performance. The results of this study support the research conducted by Na et al. (2019), Naidoo (2010), Rosli and Sidek (2013), Rua et al. (2018), and Ulubeyli et al. (2018).

Overall, competitive strategies, including cost leadership, differentiation, and focus, mediate the relationship between innovation and SME performance. In terms of product innovation, competitive strategy has been

observed to fully mediate the relationship between product innovation and SME performance. This means that competitive strategies have an important role for SMEs that implement product innovation. In contrast, SMEs that carry out process innovation tend to be able to improve their performance without going through a competitive strategy. However, SMEs can also achieve performance advantages if the application of process innovation also aligns with competitive strategies.

## Conclusions and suggestions

It is undeniable that the external environment affects the sustainability of a business. Uncertainty and risk that is difficult to predict, if not balanced with a strategy that fits the external environment, can reduce the performance of an organization. Likewise, in the midst of COVID-19 pandemic, business actors of various scales and sectors, including SMEs, must seek various ways so that their businesses can run. SMEs must be able to update their management strategies in order to maintain their businesses.

This study examined the relationship between innovation and the performance of SMEs and the role of competitive strategy as a mediating variable for SMEs that engaged in culinary sector in Indonesia, specifically in Surabaya (the second largest city in Indonesia). Basically, the culinary business is a business whose market share is relatively wider than other sectors, this is because anyone regardless of age, gender, and other characteristics, definitely needs food.

Product and process innovations are becoming more relevant for Culinary SMEs in the midst of their efforts to maintain performance in the midst of the COVID-19 pandemic. Innovation through competitive strategies can improve the performance of SMEs in Surabaya. SMEs can take advantage of the resources they have in response to the economic crisis and use them to produce new products or improve existing products (Bivona & Cruz, 2021). When the pandemic occurred, people's concerns regarding food began to shift, where they paid great attention to aspects of hygiene and aspects of the benefits of products for health. Of the three types of competitive strategies that can be adopted by SMEs, it turns out that all three have an important effect on the sustainability of the SMEs business which in turn can improve SMEs performance. It is expected that this paper can provide new insights for readers in response to the pandemic. This research contributes to the design of innovation with a competitive strategy on the performance of SMEs. This research narrows the scope of innovations that can be interpreted broadly, and these innovations are highly relevant for small- to medium-scale businesses. In addition, through this research, the relationship between innovation and certain strategies is evident, including the implementation of these strategies in the midst of the macroeconomic crisis. SME actors can apply innovative designs according to the strategic approach they apply

to develop or maintain their business in the midst of the COVID-19 pandemic. For example, SMEs will tend to create food products that are processed by adding ingredients that are believed can increase immunity and maintain health during a pandemic, such as adding ginger, turmeric, galanga, lemongrass, and curcuma. Based on the mediation test result, it showed that the three competitive strategies (cost leadership, differentiation, and focus) can mediate both product and process innovation. Nevertheless, without paying more attention to the three strategies in which business actors can utilise them, it turns out that process innovation more able to provide better performance results for SMEs. As noted by Chaarani et al. (2021), process innovation is the major role during the COVID-19 pandemic for SMEs in enhancing their performance. Thus, the practical implication is the business actor of culinary SMEs have to be wary to the new process practices that focus on reduction of cost, controlling the cost, as well as the elimination of non value-added activities for the business.

Further research can expand the interpretation of innovations to include organizational innovation, marketing, and business model innovation. In addition, researchers must also pay attention to the demographic factors of the respondents that can also influence the dependent variable. Furthermore, this research framework is expected to be suitable for further development in other regions of Indonesia. Respondents for further research are expected to be more heterogeneous (up to a medium scale). Further research can expand the scope of the SME sector, incorporating other sectors such as accommodation, fashion, or handicrafts.

### Acknowledgements

We thank Prof. Basuki and Prof. I Made Narsa who discussed the matter and provided constructive comments and suggestions.

### Funding

No funding was received for conducting this study.

### Author contributions

The authors confirm contribution to the paper as follows: study conception and design: Pusung and Narsa; Data collection: Pusung; Analysis and interpretation of results: Pusung and Narsa; Draft manuscript preparation: Wardhaningrum. All authors reviewed the results and approved the final version of the manuscript.

### Disclosure statement

All authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

### References

- Al-Mamary, Y. H., Alwaheeb, M. A., Alshammari, N. G. M., Abdulrab, M., Balhareth, H., & Soltane, H. B. (2020). The effect of entrepreneurial orientation on financial and non-financial performance in Saudi SMEs: A review. *Journal of Critical Reviews*, 7(14), 200–208. <https://doi.org/10.31838/jcr.07.14.35>
- Al-Sādi, A. F., Abdallah, A. B., & Dahiyat, S. E. (2017). The mediating role of product and process innovations on the relationship between knowledge management and operational performance in manufacturing companies in Jordan. *Business Process Management Journal*, 23(2), 349–376. <https://doi.org/10.1108/BPMJ-03-2016-0047>
- Ar, I. M., & Baki, B. (2011). Antecedents and performance impacts of product versus process innovation: Empirical evidence from SMEs located in Turkish science and technology parks. *European Journal of Innovation Management*, 14(2), 172–206. <https://doi.org/10.1108/14601061111124885>
- Banker, R. D., Mashruwala, R., & Tripathy, A. (2014). Does a differentiation strategy lead to more sustainable financial performance than a cost leadership strategy? *Management Decision*, 52(5), 872–896. <https://doi.org/10.1108/MD-05-2013-0282>
- Bianchi, C., Cosenz, F., & Marinković, M. (2015). Designing dynamic performance management systems to foster SME competitiveness according to a sustainable development perspective: Empirical evidences from a case-study. *International Journal of Business Performance Management*, 16(1), 84–108. <https://doi.org/10.1504/IJBPM.2015.066042>
- Bivona, E., & Cruz, M. (2021). Can business model innovation help SMEs in the food and beverage industry to respond to crises? Findings from a Swiss brewery during COVID-19. *British Food Journal*, 123(11), 3638–3660. <https://doi.org/10.1108/BFJ-07-2020-0643>
- Charani, H., Vrontis, D., El Nemar, S., & El Abiad, Z. (2021). The impact of strategic competitive innovation on the financial performance of SMEs during COVID-19 pandemic period. *Competitiveness Review: An International Business Journal*, 32(2), 282–301. <https://doi.org/10.1108/CR-02-2021-0024>
- Choongo, P. (2017). A longitudinal study of the impact of corporate social responsibility on firm performance in SMEs in Zambia. *Sustainability*, 9(8), 1300. <https://doi.org/10.3390/su9081300>
- Eniola, A., & Ektebang, H. (2014). SME firms performance in Nigeria: Competitive advantage and its impact. *International Journal of Research Studies in Management*, 3(2), 75–86. <https://doi.org/10.5861/ijrsm.2014.854>
- Ghozali, I. (2014). *Structural equation modeling: Metode alternatif dengan partial least square (PLS)*. Badan Penerbit Universitas Diponegoro.
- Ginanjar, D. (2020). *Optimistic Bisnis Kuliner Bertahan saat Pandemi Covid-19*. <https://www.jawapos.com/surabaya/21/11/2020/optimistic-bisnis-kuliner-bertahan-saat-pandemi-covid-19/>
- Hafeez, M. H., Noor Mohd Shariff, M., & Lazim, H. bin M. (2013). Does innovation and relational learning influence SME performance? An empirical evidence from Pakistan. *Asian Social Science*, 9(15), 204–213. <https://doi.org/10.5539/ass.v9n15p204>
- Harwika, W., & Malet, C. (2020). Quintuple helix and innovation on performance of SMEs within ability of SMEs as a mediator variable: A comparative study of creative industry in Indonesia and Spain. *Management Science Letters*, 10(6), 1389–1400. <https://doi.org/10.5267/j.msl.2019.11.018>



- Herlinawati, E., & Machmud, A. (2020). The effect of innovation on increasing business performance of SMEs in Indonesia. *WSEAS Transactions on Business and Economics*, 17, 51–57. <https://doi.org/10.37394/23207.2020.17.7>
- Hilmi, M. F., Ramayah, T., Mustapha, Y., & Pawanchik, S. (2010). Product and process innovativeness: Evidence from Malaysian SMEs. *European Journal of Social Sciences*, 16(4), 547–555.
- Ho, G. T. S., Choy, K. L., Chung, S. H., & Lam, C. H. Y. (2010). An examination of strategies under the financial tsunami. *Industrial Management and Data Systems*, 110(9), 1319–1336. <https://doi.org/10.1108/02635571011087419>
- Indonesian Central Bureau of Statistics. (2020). *Katalog: 3101028*. BPS.
- Ismail, Narsa, I. M., & Basuki. (2019). The effect of market orientation, innovation, organizational learning and entrepreneurship on firm performance. *Journal of Entrepreneurship Education*, 22(3), 1–19.
- Istifadah, N., Wasiaturrahma, W., & Dumauli, M. T. (2018). Sektor Perdagangan Kota Surabaya Di Era Kompetisi Global. *Jurnal Riset Ekonomi Dan Manajemen*, 17(2), 147. <https://doi.org/10.17970/jrem.17.170201.ID>
- Khan, I., Haleem, A., & Javaid, M. (2020). Analysing COVID-19 pandemic through cases, deaths, and recoveries. *Journal of Oral Biology and Craniofacial Research*, 10(4), 450–469. <https://doi.org/10.1016/j.jobocr.2020.08.003>
- Khan, R. U., Salamzadeh, Y., Kawamorita, H., & Rethi, G. (2020). Entrepreneurial orientation and small and medium-sized enterprises' performance; Does "Access to Finance" moderate the relation in emerging economies? *Vision: The Journal of Business Perspective*, 25(1). <https://doi.org/10.1177/0972262920954604>
- Kiveu, M. N., Namusonge, M., & Muathe, S. (2019). Effect of innovation on firm competitiveness: The case of manufacturing SMEs in Nairobi County, Kenya. *International Journal of Business Innovation and Research*, 18(3), 307–327. <https://doi.org/10.1504/IJBIR.2019.098251>
- Koentjoro, S., & Gunawan, S. (2020). Managing knowledge, dynamic capabilities, innovative performance, and creating sustainable competitive advantage in family companies: A case study of a family company in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), 90. <https://doi.org/10.3390/joitmc6030090>
- Kotane, I., & Kuzmina-Merlino, I. (2017). Analysis of small and medium sized enterprises' business performance evaluation practice at transportation and storage services sector in Latvia. *Procedia Engineering*, 178, 182–191. <https://doi.org/10.1016/j.proeng.2017.01.093>
- Kurniati, E. D., Susilowati, I., & Suharno. (2019). Sustainable competitive advantage of SMEs through resource and institutional-based management: An empirical study of batik SMEs in Central Java, Indonesia. *Market-Trade*, 31(1), 61–82. <https://doi.org/10.22598/mt/2019.31.1.61>
- Laforet, S. (2011). A framework of organisational innovation and outcomes in SMEs. *International Journal of Entrepreneurial Behaviour and Research*, 17(4), 380–408. <https://doi.org/10.1108/13552551111139638>
- Lestari, S. D., Leon, F. M., Widyastuti, S., Brabo, N. A., & Putra, A. H. P. K. (2020). Antecedents and consequences of innovation and business strategy on performance and competitive advantage of SMEs. *Journal of Asian Finance, Economics and Business*, 7(6), 365–378. <https://doi.org/10.13106/jafeb.2020.vol7.no6.365>
- Linton, G., & Kask, J. (2017). Configurations of entrepreneurial orientation and competitive strategy for high performance. *Journal of Business Research*, 70, 168–176. <https://doi.org/10.1016/j.jbusres.2016.08.022>
- Mujanah, S., Ardiana, I. D. K. R., Nugroho, R., Candraningrat, C., Fianto, A., & Arif, D. (2022). Critical thinking and creativity of MSMEs in improving business performance during the Covid-19 pandemic. *Uncertain Supply Chain Management*, 10(1), 19–28. <https://doi.org/10.5267/j.uscm.2021.10.014>
- Na, Y. K., Kang, S., & Jeong, H. Y. (2019). The effect of market orientation on performance of sharing economy business: Focusing on marketing innovation and sustainable competitive advantage. *Sustainability*, 11(3), 729. <https://doi.org/10.3390/su11030729>
- Naidoo, V. (2010). Firm survival through a crisis: The influence of market orientation, marketing innovation and business strategy. *Industrial Marketing Management*, 39(8), 1311–1320. <https://doi.org/10.1016/j.indmarman.2010.02.005>
- Narsa, N. P. D. R. H. (2018). Inovasi pelayanan: Telaah literatur perbandingan sektor privat dan sektor publik. *Berkala Akuntansi dan Keuangan Indonesia*, 3(2), 46–62. <https://doi.org/10.20473/baki.v3i2.9871>
- Narsa, N. P. D. R. H., Prananjaya, K. P., & Narsa, I. M. (2021). Studi Deskriptif Awareness dan Persepsi pada Pelaku UMKM dan Koperasi Mengenai SAK EMKM: Sebuah Update. *Wahana Riset Akuntansi*, 9(2), 163–195. <https://doi.org/10.24036/wra.v9i2.113537>
- Nasution, D. A. D., Erlina, E., & Muda, I. (2020). Dampak Pandemi COVID-19 terhadap Perekonomian Indonesia. *Jurnal Benefita*, 5(2), 212. <https://doi.org/10.22216/jbe.v5i2.5313>
- Noor, L. S., Derriawan, & Soebagyo. (2019). Inovasi UMKM Boga Tradisional Dalam Mencapai Keunggulan Bersaing. *JRB-Jurnal Riset Bisnis*, 2(1), 70–83. <https://doi.org/10.35592/jrb.v2i1.258>
- Novia, C., Santoso, I., Soemarno, S., & Astuti, R. (2020). Classification of product life cycle cluster to improve the performance of SMEs apple chips. *Food Research*, 4(6), 1859–1866. [https://doi.org/10.26656/fr.2017.4\(6\).208](https://doi.org/10.26656/fr.2017.4(6).208)
- Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. Free Press. <https://books.google.co.id/books?id=5xxHAAAAMAAJ>
- Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press "[u.a.]" <https://books.google.co.id/books?id=cMytzQEACAAJ>
- Qosasi, A., Maulina, E., Purnomo, M., Muftiadi, A., Permana, E., & Febrian, F. (2019). The impact of information and communication technology capability on the competitive advantage of small businesses. *International Journal of Technology*, 10(1), 167–177. <https://doi.org/10.14716/ijtech.v10i1.2332>
- Robb, A. M., & Watson, J. (2012). Gender differences in firm performance: Evidence from new ventures in the United States. *Journal of Business Venturing*, 27(5), 544–558. <https://doi.org/10.1016/j.jbusvent.2011.10.002>
- Rosli, M. M., & Sidek, S. (2013). The impact of innovation on the performance of small and medium manufacturing enterprises: Evidence from Malaysia. *Journal of Innovation Management in Small & Medium Enterprise*, 2013, 885666. <https://doi.org/10.5171/2013.885666>
- Roy, A. (2020). *A comprehensive guide for design, collection, analysis and presentation of Likert and other Rating Scale Data (Analysis of Likert Scale data)*. Independently published.
- Rua, O., França, A., & Fernández Ortiz, R. (2018). Key drivers of SMEs export performance: The mediating effect of com-



- petitive advantage. *Journal of Knowledge Management*, 22(2), 257–279. <https://doi.org/10.1108/JKM-07-2017-0267>
- Sande, J. B., & Ghosh, M. (2018). Endogeneity in survey research. *International Journal of Research in Marketing*, 35(2), 185–204. <https://doi.org/10.1016/j.ijresmar.2018.01.005>
- Seo, Y. W., & Chae, S. W. (2016). Market dynamics and innovation management on performance in SMEs: Multi-agent simulation approach. *Procedia Computer Science*, 91, 707–714. <https://doi.org/10.1016/j.procs.2016.07.060>
- Sinurat, M., Lilinesia, L., Subhan, M., & Simanjuntak, A. (2021). The culinary sector MSME survival strategy in effort to restore populist economy based on the creative industry during the Covid-19 pandemic. *Management Research and Behavior Journal*, 1(1), 7–14. <https://doi.org/10.29103/mrbj.v1i1.3788>
- Siriwan, U., Ramabut, C., Thitikalya, N., & Pongwirithon, R. (2013). The management of small and medium enterprises to achieve competitive advantages in Northern Thailand. *International Journal of Arts & Sciences*, 6(1), 147–157. <https://search.proquest.com/docview/1419027272/fulltext-PDF/F8197764CCFB458APQ/61?accountid=38628>
- Siyoto, S., & Sodik, M. A. (2015). *DASAR metodologi penelitian*. Literasi Media Publishing. <https://books.google.co.id/books?id=QPhFDwAAQBAJ>
- Styaningrum, F., Soetjipto, B. E., & Wulandari, D. (2020). The determinants of SMEs' sustainability. *Humanities and Social Sciences Reviews*, 8(4), 422–430. <https://doi.org/10.18510/hssr.2020.8441>
- Sulistyo, H., & Ayuni, S. (2020). Competitive advantages of SMEs: The roles of innovation capability, entrepreneurial orientation, and social capital. *Contaduria y Administracion*, 65(1), 1–18. <https://doi.org/10.22201/fca.24488410e.2020.1983>
- Susskind, D., & Vines, D. (2020). The economics of the COVID-19 pandemic: An assessment. *Oxford Review of Economic Policy*, 36(Suppl. 1), S1–S13. <https://doi.org/10.1093/oxrep/graa036>
- Tjahjadi, B., Soewarno, N., & Gunawan, G. M. (2020). Effect of information capital readiness on business performance in Indonesian MSMEs: Does online market orientation matter? *Journal of Asian Finance, Economics and Business*, 7(12), 267–274. <https://doi.org/10.13106/jafeb.2020.vol7.no12.267>
- Ulubeyli, S., Kazaz, A., & Sahin, S. (2018). Survival of construction SMEs in macroeconomic crises: Innovation-based competitive strategies. *Journal of Engineering, Design and Technology*, 16(4), 654–673. <https://doi.org/10.1108/JEDT-03-2018-0057>
- Umar, A., Che Omar, C. M. Z., Hamzah, M. S. G., & Hashim, A. (2018). The mediating effect of innovation on entrepreneurial competencies and business success in Malaysian SMEs. *International Business Research*, 11(8), 142. <https://doi.org/10.5539/ibr.v11n8p142>
- Yashavantha Rao, H. C., & Jayabaskaran, C. (2020). The emergence of a novel coronavirus (SARS-CoV-2) disease and their neuroinvasive propensity may affect in COVID-19 patients. *Journal of Medical Virology*, 92(7), 786–790. <https://doi.org/10.1002/jmv.25918>