

How do product innovation, internet marketing and brand identity affect business performance of small and medium-sized agri-food processing?

Stevia Septiani*, Ma'mun Sarma, Mukhamad Najib, Niko Parulian Sirait, Nurul Hidayati

Department of Management, Faculty of Economics and Management, IPB University, Bogor 16680, Indonesia

* **Corresponding author:** Stevia Septiani, septiani.stevia@gmail.com

CITATION

Septiani S, Sarma M, Najib M, et al. (2024). How do product innovation, internet marketing and brand identity affect business performance of small and medium-sized agri-food processing?. *Journal of Infrastructure, Policy and Development*. 8(13): 7665.
<https://doi.org/10.24294/jipd7665>

ARTICLE INFO

Received: 30 June 2024
Accepted: 27 August 2024
Available online: 8 November 2024

COPYRIGHT



Copyright © 2024 by author(s).
Journal of Infrastructure, Policy and Development is published by EnPress Publisher, LLC. This work is licensed under the Creative Commons Attribution (CC BY) license.
<https://creativecommons.org/licenses/by/4.0/>

Abstract: Despite having a strategic position in supporting the Indonesian economy, the productivity of SME's is still suboptimal. The increase in the number of SME's has not been followed by increased competitiveness due to various limitations experienced by this sector. In an effort to provide a comprehensive picture in improving the performance of food processing SME's in developing countries such as Indonesia, the purpose of this study was to examine the function of product innovation, internet marketing, and brand identity in shaping competitive advantage having an impact on business performance. This research is focused on food processing SME's in the city of Bogor. The number of samples used was 100 SME's. The sampling method used the non-probability sampling method with a snowball sampling technique. The data obtained were analyzed using the Structural Equation Model (SEM). Based on the age characteristic of business actors, the majority of business actors were 40–50 years old, of which 52% had their final formal education at high school level. As many as 61% of respondents had attended business training. Based on the results of the Partially Least Square (PLS) SEM analysis, it was found that product innovation, internet marketing and brand identity all had a significant positive effect on competitive advantage and business performance. The influence of brand identity on competitive advantage had the greatest effect, with a value of 0.451. This study contributes to existing research by examining the determinants of the business performance of processed food SME's through the holistic model offered. This research is innovative because the business raises new issues related to internet marketing by SME's and investigates them empirically.

Keywords: product innovation; internet marketing; brand identity; business performance; SME's

1. Introduction

The existence of Small and Medium Enterprises (SME's) strategically support the nation's economy. In Indonesia, SME's are able to contribute to Gross Domestic Product (GDP) by 60% and absorb around 97% of the workforce (Kominfo, 2023). Based on the report from the Ministry of Cooperatives and MSME's of the Republic of Indonesia by 2018–2019, MSME's have a market share of 99.99%. This is divided into micro-enterprises at 98.67% (64.6 million units), small enterprises at 1.22% (798,679 units) and medium-sized enterprises at 0.10% (65,465 units). In contrast, large enterprises make up only 0.01% (5637 units) of the total business actors in Indonesia.

Among the several existing sectors, the agri-food processing sector has its own challenges and uniqueness. This industry has strict regulations regarding food safety, such as hygiene and labeling standards, which are overseen by agencies such as the FDA in the US and BPOM in Indonesia (Hariyadi 2024). Unlike other sectors such as

the clothing processing industry, this industry is regulated by worker rights and safety regulations, with various product safety standards also applicable, although not as strict as the food industry (Taplin, 2014). Processed food SME's are one of the more rapidly growing clusters, especially in tourist destinations such as the city of Bogor. Based on data obtained from the Bogor City Office of Cooperatives and SMEs (2018), the number of SME's engaged in food processing in Bogor City in 2018 was 2875 units, dominating all other SME' clusters. The processed food SME's consist of 226 medium-sized business units and 2649 small business units. In addition to having a strategic role in improving the community's economy, SME's in the processed food sector also have a role in helping to improve community health values through food with standardized nutritional value (Lestari et al., 2022). Unfortunately, the increase in the number of SME's has not been followed by an increase in their competitiveness due to various limitations experienced by this sector. The various constraints that Indonesian food processing SMEs face, including human resource limitations, marketing challenges, and financial constraints (Santoso and Putra, 2020).

Studies from Al-Zyadaat et al. (2012) and Afriyie et al. (2019) show that one of the key factors influencing marketing performance is the ability of SMEs to innovate. On the other hand, the massive changes in technology, digitalization, and the internet have an impact on the marketing sector. Marketing trends are shifting from conventional marketing to digital-based marketing (Syukri and Sunrawali, 2022). The use of the internet for marketing is considered a trend determinant, especially information technology, that influences the world of internet marketing (Syukri and Sunrawali, 2022). The growing popularity and use of internet marketing has paved the way for SME's to thrive. Nuseir (2018) finds a positive impact on SME' product sales when these use internet marketing optimally. However, the adaptation and digital literacy of SME's are still challenging. Various challenges faced by SME's can be overcome by designing competitive business development strategies (Naradda et al., 2020). One strategy that can be implemented is to apply a brand strategy or branding strategy. Brands can act as product identities and differentiate them from competing products. In addition, branding is also capable of being a formidable competitive attribute and will be very difficult to imitate if managed properly (Muhonen et al., 2017; Odoom et al., 2017; Yieh et al., 2018). Therefore, if SME's have a strong brand aspect, it will enhance branding performance as a competitive advantage (Reimann et al., 2021) and result in greater profits (Nguyen et al., 2021).

In an effort to create a comprehensive overview in improving the performance of food processing SME's in developing countries such as Indonesia, the present study was carried out with the purpose of examining how product innovation, internet marketing, and brand identity contribute to forming a competitive advantage that influences business performance. This study contributes to existing research by examining the determinants of the business performance of processed food SME's through the holistic model offered. This research is innovative because the business raises new issues related to internet marketing by SME's and investigates them empirically.

2. Theoretical background and hypotheses

2.1. Product innovation

Several previous studies explain innovation in various contextual perspectives. Innovativeness refers to a company's ability to build new concepts, services, and promotional strategies (Yen et al., 2020). Varadarajan (2020) states that innovation is related to marketing strategy, performance, and the resources possessed. The concept of innovation as a strategic approach is based on competition among businesses and various implementations of different strategies (Xiong et al., 2021). It can be incorporated into the structure of a strategic approach and market knowledge competency driven by a focus on information processes, customers, and competitors (Nuryakin et al., 2021). On the other hand, Muller et al. (2021) in their research indicate that strategies for innovation encompass generating or obtaining fresh resources, evolving new customer segments, and establishing innovative business models. Innovation includes the ability to accept or implement new concepts, processes, products, and services (Farida and Setiawan, 2022).

Nuryakin's Groups (2018) research showed that innovation groups have a significant influence on the competitive advantage of SME's and the marketing performance of SME's, so that the innovation ability of SME's is a key success factor to create superiority and competitiveness. The innovative atmosphere within an organization involves activities that stimulate creative behavior, foster active exchange of ideas, and enhance information flow influenced by entrepreneurial self-confidence. One of the primary focuses of product innovation in SME's is to meet market needs, making innovative products a competitive advantage for the company. Product attributes in SME's, such as size, color, flavor, consistency, packaging, and are closely related to consumer preferences (Fuliyana and Maria, 2022). To meet different consumer preferences, it is important to innovate on these aspects. Based on the literature, we propose the following hypotheses:

H1: Product innovation has a positive effect on business performance.

H2: Product innovation has a positive effect on competitive advantage.

2.2. Internet marketing

Today the Internet is well developed in both advanced and developing countries. One of the contemporary marketing tools involves utilizing internet marketing, enabling business entities to create an advanced customer interaction process, provide personalized services, establish effective feedback, swiftly acquire marketing information, allowing effective decision-making, conduct high-quality advertising campaigns, all fundamentally contributing to enhancing the competitiveness of the enterprise (Fomichenko et al., 2020). According to Kotler et al. (2003), Internet Marketing involves utilizing various components in online advertising to elicit responses from users, encompassing both the creative and technical aspects of the internet, such as design, development, advertising, and marketing. Kapinus (2012) also states that internet marketing is a series of marketing activities that utilize internet technology, computer information technology, digital technology, and electronic communication networks with the aim of meeting the needs and desires of consumers.

Digital media helps SME's in every aspect, not only for selling products but also for purchases and procurements. SME's can now find the best and cheapest procurement from any corner of the world.

Study conducted by Shaw and Reuer (2020) suggests the influence of internet technologies on the performance metrics of small businesses, focusing on efficiency and profitability. Peng et al. (2021) also states that market-driven innovation significantly contributes to company performance. One of the marketing innovations can be seen at company's internet marketing that they did. Furthermore, individuals are evolving and spending more time on social media, making it appealing for local businesses to reach a broader audience and generate significant financial gains (Bilgin, 2018). Lee and Cho (2021) said that digital marketing innovations affect business performance through marketing capabilities, highlighting the stronger indirect impacts. Purwanti et al. (2022) also states in their research findings that digital marketing capabilities have a positive effect on MSME performance, and the strengthens of dynamic environment the relationship between digital marketing capabilities and MSME performance. Additionally, based on the research findings of Wahirayasa and Kusuma (2018), e-marketing, or internet marketing, has a positive influence on business performance. Internet marketing activities are very suitable in helping SME's with all their limitations. Based on the literature, we propose the following hypotheses:

H3: Internet marketing has a positive effect on business performance.

H4: Internet marketing has a positive effect on competitive advantage.

2.3. Brand identity

Branding is one of the important aspects that must be built by a business in this era of globalization. Branding is a strategy that includes a series of activities ranging from products and their attributes to marketing communications. Several previous studies have proven a strong correlation between branding and competitive advantage and the business performance of a business. Despite having great benefits, brand management activities in SME's still receive little attention from SME' owners. Generally, these activities have not become a top priority in SME'-class business activities. According to Kusi et al. (2022), SME's still rarely engage in brand management, despite the relevance of brand management playing a significant role in their business success, especially considering their limited resources.

The core idea of branding is brand identity—a vision of how a brand should be, what it aims to achieve (Ianenکو et al., 2020). Identity is a planned depiction of a brand that sets guidelines for all marketing activities of the company. Brand identity aims to communicate the character and uniqueness possessed by a brand to consumers, thus gaining recognition, appreciation, and support from them (Barros et al., 2020). In this case, brand identity is required as an element that constructs the factor of competitive advantage for SMEs. A strong brand identity provides significant benefits for a product (Clarissa and Ellitan, 2023). Furthermore, Yusuf (2021) states that brand image also has a significant effect on purchasing decision.

A product with distinctive characteristics that are not easily imitated by competitors will create product differentiation, ultimately generating a competitive

advantage (Bernarto et al., 2022). According to Kotler et al. (2013), several criteria for brand elements include being memorable, meaningful, likable, transferable, adaptable, and protectable. Brand elements should leave an impression and capture attention, making them easy to remember and recognize. Additionally, these elements should be legally and competitively protectable. Marketers need to register them with legal authorities to become valid trademarks. Based on the literature, we propose the following hypotheses:

H5: Brand identity has a positive effect on competitive advantage.

H6: Brand identity has a positive effect on business performance.

2.4. Competitive advantage

The success of a business depends on its superiority compared to its competitors. According to Udriyah et al. (2019), competitive advantage is the combination of different products that set SMEs apart from their rivals and provide them a distinct and advantageous position in the market. Competitive advantage is closely related to the company's core competencies. When a company possesses strong core competencies, it enhances its competitive advantage (Putra and Darmawan, 2022). The dimensions of competitive advantage itself, according to Afsharghasemi et al. (2013), include innovation, differentiation, and low-cost leadership. The possession of competitive advantages and core competencies facilitates the expansion of a company's market share, increases customer satisfaction and loyalty, and boosts profitability. So, when a business has found its competitive advantage, this is correlated with increasing business performance. However, the company's market experience usually does not lead to a greater inclination towards product innovation (Rata et al., 2014).

This is revealed in a study conducted by Haseeb et al. (2019), indicating that competitive advantage can serve as a mediating variable with a positive and significant influence on business performance (Udriyah et al., 2019). Furthermore, research by Haseeb et al. (2019) also suggests that sustainable business success is impacted by competitive advantage, with social and technological issues being key factors in business (Haseeb et al., 2019). Yildiz and Karakas (2012) state that there are eleven indicators that make up the dimensions of business performance: profit and profit growth, sales and sales growth, market share and market share growth, successful new product launch, overall business performance, return on investment, customer satisfaction, return on sales, procurement of high-quality goods and services, reputation and image, and competitive advantage (Nuryakin, 2018). Based on the literature, we propose the following hypotheses:

H7: Competitive advantage has a positive effect on business performance.

2.5. Business performance

Business performance involves evaluating how effectively an organization uses its resources to meet goals and deliver value. It is assessed through various dimensions, each focusing on different aspects of business success: financial performance, operational performance, customer performance, and innovative performance. Financial performance measures how well a company achieves its financial goals, focusing on profitability, revenue, and financial health (Kaplan and Norton, 1992).

Operational performance evaluates the efficiency and effectiveness of internal processes, including production, service delivery, and supply chain management. Customer performance assesses how well a company meets customer needs and maintains loyalty, often measured through satisfaction surveys and Net Promoter Scores (NPS) (Fornell, 1996). Innovative measures a company's ability to innovate and adapt to market changes, focusing on new product development and innovative solutions (Tushman and O'Reilly, 1996). These definitions provide a comprehensive view of business performance, encompassing financial results, operational efficiency, customer satisfaction, and innovation. Each dimension offers insights into different ways organizations can measure and enhance their overall effectiveness and success. The conceptual framework can be seen in **Figure 1**.

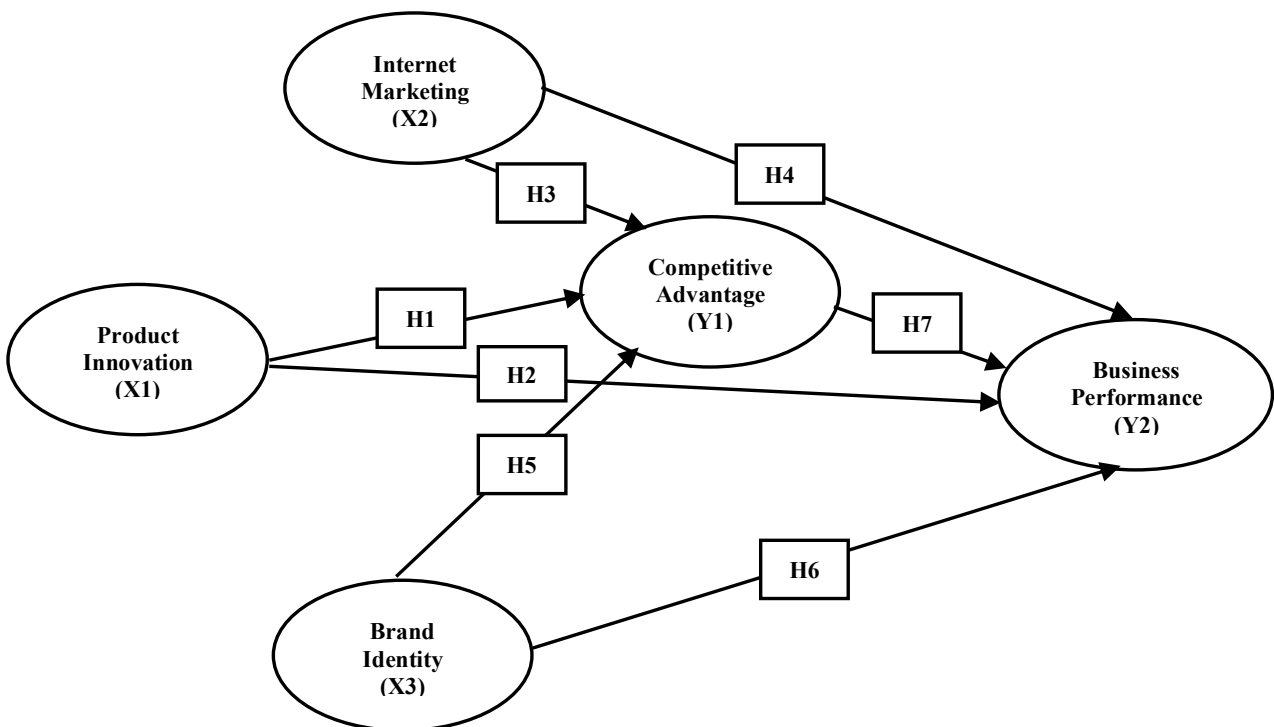


Figure 1. Conceptual framework.

3. Materials and methods

3.1. Data collection

The subject of this research is SME's engaged in processed food commodities. SME's that are used as respondents are ones which produce and sell more than one product variant. This research is focused on food processing SME's in the city of Bogor that already have and market their products with their own brands.

The minimum number of samples for this study was determined in order to use Structural Equation Modeling Partial Least Square, which assumes that the sample size should be more than ten times the maximum number of model links in the inner or outer model, or the largest number of indicators lead to a variable (Hair et al., 2021; Kock and Hadaya, 2018). In this study, the highest number of indicators that lead to a variable is six indicators, so the minimum number of samples based on this assumption is 60 sample units. The number of samples used amounted to 100 units of SME's. The

snowball sampling approach was paired with the non-probability sampling method in the sampling process. An overview of the impact of digital marketing and product innovation on market performance will be given by this study. The research data was obtained through completed questionnaires and interviews with 100 food processing SME's in the city of Bogor. The measuring scale used in this study is a Likert scale of 1 to 5. Data collection was carried out over October–November 2019.

3.2. Research model and measurement items

In this study, the tested variables are described in terms of several indicators that can be measured directly. The indicator variables can be seen in **Table 1**.

Table 1. Indicator variables measured.

Variable	Indicators
Product innovation (X1) (Varadarajan, 2020; Yen et al., 2020)	Availability in various flavors (X1.1)
	Availability in various sizes (X1.2)
	Availability of the same product with different prices (X1.3)
	Availability of different products with the same brand (X1.4)
Internet marketing (X2) (Kotler et al., 2003; Kapinus, 2012)	Using websites to introduce and sell products (X2.1)
	Using company social media to sell products (X2.2)
	Placing product advertisement on search engines like google (X2.3)
	Using the marketplace to sell products (X2.4)
	Using paid advertising services on facebook, youtube, instagram (X2.5)
	Optimizing Search Engine Optimization (SEO) to introduce products (X2.6)
Brand identity (X3) (Kotler et al., 2013; Bernarto et al., 2022)	Product brand is difficult to imitate (X3.1)
	Memorable brand (X3.2)
	Registered product mark (X3.3)
	Product brand is easy to pronounce (X3.4)
Competitive advantage (Y1) (Afsharghasemi et al., 2013)	Cost efficient distribution (Y1.1)
	Cost efficient marketing (Y1.2)
	Broad consumer segment (Y1.3)
	Fast licensing process (Y1.4)
	Wide distribution range (Y1.5)
Business performance (Y2) (Yıldız and Karakaş, 2012)	Increase in profit (Y2.1)
	Increase in sales volume (Y2.2)
	Market share increase (Y2.3)
	Improved corporate image (Y2.4)

3.3. Data analysis

The data obtained will be analyzed using the Structural Equation Model (SEM) using the Smart PLS 3.0 application. The main consideration in using this processing technique is because this study has more than one dependent variable, whereas SEM alone is considered more effective when compared to regression analysis. In addition, SEM-PLS was chosen because the research objective is predictive (Hair et al., 2019).

4. Results

4.1. Validity and reliability test

The validity test in this study needed the estimated r value to be greater than the r table value (>0.361) and was first conducted on 30 initial responders at a significance level of 0.05. Based on the results of the validity test of the data from 30 respondents, the calculated r value for all indicators has met the requirements (>0.361). Reliability tests were also carried out on data obtained from 30 initial responders with a significance level of 0.05 where the reliability test required the Cronbach's α value to be >0.70 (Adeniran, 2019). Based on the results of the validity test on the data from 30 respondents, a Cronbach's α value of 0.979 was obtained. Apart from being seen from the Cronbach's Alpha value, a reliable indicator can also be seen from the correlated item-total correlation value. For an indicator to be deemed credible, its correlated item-total correlation must be at least 0.50 (Hair et al., 2019). The results of the validity and reliability test can be seen in **Table 2**. Based on the fact that the results of the initial reliability and validity tests have been met, this questionnaire has fulfilled the requirements to be carried out on 100 samples.

Table 2. Validity and reliability test results.

Indicator	Validity	Reliability	
	Pearson correlation	Total correlation	Cronbach's alpha value
X1.1	0.883	0.869	0.977
X1.2	0.789	0.768	0.978
X1.3	0.861	0.849	0.977
X1.4	0.826	0.806	0.978
X2.1	0.824	0.806	0.978
X2.2	0.686	0.654	0.979
X2.3	0.824	0.803	0.978
X2.4	0.807	0.787	0.978
X2.6	0.857	0.838	0.977
X3.1	0.689	0.654	0.979
X3.2	0.953	0.949	0.977
X3.3	0.946	0.939	0.977
X3.4	0.854	0.842	0.977
Y1.1	0.919	0.908	0.977
Y1.2	0.814	0.791	0.978
Y1.3	0.824	0.807	0.978
Y1.4	0.811	0.787	0.978
Y1.5	0.784	0.762	0.978
Y2.1	0.952	0.948	0.977
Y2.2	0.891	0.879	0.977
Y2.3	0.862	0.849	0.977
Y2.4	0.880	0.870	0.977

4.2. Profile of the SME's

The characteristics of business actors in this study were obtained directly through a research questionnaire conducted on food processing SME's in Bogor City. Based on the age characteristics of business actors, the majority (52%) of business actors are 40–50 years old. Based on the latest formal education obtained by business actors, the majority (53%) of business actors have high school/vocational high school leaving certificates, followed by 31% graduates and 13% diploma DI-3 graduates. Opportunity is the most dominating reason for working in the food processing industry in Bogor City with 68% wanting to start a business. The interview results show that 61% of respondents had undergone business training. In general, agrifood processing SMEs have been running their businesses for more than 5 years (61%) with an average annual income of more than IDR 300 million to IDR 2.5 billion, as many as 87%.

Data from The Central Statistics Agency (BPS, 2021), indicated that the productive age is those in the age range of 15–65 years. Blanchflower and Oswald (2019) stated that the relationship between age and entrepreneurship, highlighting the hump-shaped pattern where the likelihood of starting a business increase with age up to a point before declining. This is in line with data from the Global Entrepreneurship Monitor, which shows that most entrepreneurs are between the ages of twenty-five and forty-five. One of the respondents' reasons for beginning their business is their degree of education. where opportunity was their main reason for starting a business. According to Dutta et al. (2011), Hunady et al. (2018) and Passaro et al. (2018), successful entrepreneurs must be able to identify market opportunities which are not appropriated by others, and then make prompt and efficient use of these possibilities. Here's education can come in handy by giving the appropriate knowledge and skills.

This is consistent with the claim that a college education can improve general cognitive skills including thinking fast (processing speed), remembering details (working memory), adapting to task objectives (cognitive control), and solving new problems (reasoning). Furthermore, the results of this study, which examined the link between the independent and dependent variables and found that most respondents had received entrepreneurship training, are further supported by the characteristics of the respondents. Klinger and Schündeln (2011) and Kusmulyono and Prakarsa (2018) argue that participating in business training will significantly increase the possibility of starting a business or expanding an existing business. In addition, the findings of others (Elert et al., 2015; Hunady et al., 2018; Karadag, 2017; Tessema, 2012), is that there is a positive effect on income and company survival by attending entrepreneurship education and training. The positive effect obtained is suspected to be a high level of ability to innovate based on participating in entrepreneurship training (Efobi and Orkoh, 2018).

4.3. Analysis of structural equation model (SEM)

SEM measurements have two parts, namely the outer model measurement and the inner model measurement. Convergent validity, discriminant validity, indicator reliability, and internal consistency reliability values are the external model metrics. According to Hair et al. (2019), the internal consistency reliability test can be said to be fulfilled if the composite reliability value is >0.7 and the reliability indicator test is

met if the outer loading value is within a tolerance of 0.4–0.7 (more than 0.7 is expected). The convergent validity test is met if the AVE value is >0.5 and the discriminant validity test can be analyzed based on the AVE square root value, HTMT (Heterotrait-Monotrait) ratio and cross loading value analysis. The reliability indicator test in this study emphasizes the loading factor value >0.6. Certain indicators, such as the X2.5 indicator (0.599), have a loading factor value less than 0.6 according to the experiments that have been conducted, then one can modify the model by eliminating the indicator (Hair et al., 2019). Thus, all indicators in this SEM model have a loading factor above 0.6. The loading factor results are listed in **Table 3**.

Table 3. Final measurement model testing results.

Latent and observed variable	Factor loadings
Product innovation (X1)	
• Availability in various flavors (X1.1)	0.866
• Availability in various sizes (X1.2)	0.818
• Availability of the same product with different prices (X1.3)	0.815
• Availability of different products with the same brand (X1.4)	0.778
Internet marketing (X2)	
• Using websites to introduce and sell products (X2.1)	0.786
• Using company social media to sell products (X2.2)	0.784
• Placing product advertisement on search engines like google (X2.3)	0.784
• Using the marketplace to sell products (X2.4)	0.652
• Optimizing Search Engine Optimization (SEO) to introduce products (X2.6)	0.856
Brand identity (X3)	
• Product brand is difficult to imitate (X3.1)	0.754
• Memorable brand (X3.2)	0.917
• Registered product mark (X3.3)	0.863
• Product brand is easy to pronounce (X3.4)	0.882
Competitive advantage (Y1)	
• Cost efficient distribution (Y1.1)	0.876
• Cost efficient marketing (Y1.2)	0.869
• Broad consumer segment (Y1.3)	0.859
• Fast licensing process (Y1.4)	0.724
• Wide distribution range (Y1.5)	0.830
Business performance (Y2)	
• Increase in profit (Y2.1)	0.904
• Increase in sales volume (Y2.2)	0.912
• Market share increase (Y2.3)	0.896
• Improved corporate image (Y2.4)	0.805

Additionally, the inner model measurement indicates that the business performance (Y2) with R^2 value is 0.806, meaning that 80.6% of market performance variables can be explained by exogenous variables X1, X2, X3 and Y1. The value of R^2 for competitive advantage (Y1) is 0.816, meaning that 81.6% of market

performance variables can be explained by exogenous variables X1, X2 and X3. The average R-Square values and the square root of the average communality index are used to compute the Goodness of Fit (GoF) index. The suggested communality value is 0.50, the GoF Small value is 0.10, GoF Medium is 0.25, and GoF Large is 0.36 (Ghozali, 2016). In this study, the GoF value is useful to show whether a model has a level of fit or not. The GoF value obtained in this study was 0.752.

4.4. Hypothesis testing

The results of the path analysis between product innovation and competitive advantage obtained a *t*-statistic value of 3.058. This value is greater than the *t*-table value (1.98). This shows that there is a significantly positive relationship and influence of product innovation on competitive advantage. These results also confirm that the first hypothesis (H1) in this study is accepted. Similarly, the results of the path analysis between product innovation and business performance, obtained a *t*-statistic value of 2.725. This value is greater than the *t*-table value (1.98). This indicates that there is a significantly positive relationship and influence between product innovation on business performance. This result also confirms that the second hypothesis (H2) is accepted. The results of the path analysis between internet marketing and competitive advantage, obtained a *t*-statistic value of 2.623. This value is greater than the *t*-table value (1.98). This means that there is a significantly positive relationship and influence between internet marketing on competitive advantage. These results confirm that the third hypothesis (H3) in this study is accepted. The results of the path analysis between internet marketing and business performance, the *t*-statistic value is 2.079. This value is greater than the *t*-table value (1.98). This shows that there is a significantly positive relationship and influence between internet marketing on competitive advantage. These results confirm that the fourth hypothesis (H4) in this study is accepted.

The results of the path analysis between brand identity and competitive advantage, obtained a *t*-statistic value of 4.479. This value is greater than the *t*-table value (1.98). This means that there is a significantly positive relationship and influence between brand identity and competitive advantage. These results confirm that the fifth hypothesis (H5) in this study is accepted. The results of the path analysis between brand identity and business performance, obtained a *t*-statistic value of 2.037. This value is greater than the *t*-table value (1.98). This shows that there is a significantly positive relationship and influence between brand identity on business performance. These results confirm that the sixth hypothesis (H6) in this study is accepted. The results of the path analysis between competitive advantage and business performance, obtained a *t*-statistic value of 2.110. This value is greater than the *t*-table value (1.98). This indicates that there is a significantly positive relationship and influence between competitive advantages on business performance. These results confirm that the seventh hypothesis (H7) in this study is accepted. The results of the path analysis can be seen in **Table 4**.

Table 4. Path analysis results.

Latent endogenous	Latent exogenous	Original sample (O)	Sample mean (M)	Standard deviation (SD)	T-statistic	P values	Decision
Competitive advantage	← Product innovation	0.286	0.292	0.093	3.058	0.002	H1 accepted
Business performance	← Product innovation	0.300	0.287	0.110	2.725	0.007	H2 accepted
Competitive advantage	← Internet marketing	0.224	0.215	0.085	2.623	0.009	H3 accepted
Business performance	← Internet marketing	0.189	0.193	0.091	2.079	0.038	H4 accepted
Competitive advantage	← Brand identity	0.451	0.443	0.095	4.749	0.000	H5 accepted
Business performance	← Brand identity	0.255	0.263	0.125	2.037	0.042	H6 accepted
Business performance	← Competitive advantage	0.218	0.211	0.103	2.110	0.035	H7 accepted

5. Discussion

5.1. Product innovation, competitive advantage and business performance

The results of the Structural Equation Modeling (SEM) indicate that product innovation has a significantly positive influence on business performance. These findings are consistent with studies carried out by Afriyie and Najib's research groups (Afriyie et al., 2019; Najib et al., 2020) who showed that innovation activities will have a positive impact on marketing performance. This will ultimately affect business performance from a financial perspective by enhancing revenue growth (Nuseir and Aljumah, 2020). According to Afriyie et al. (2020), The ability to innovate is considered one of the most crucial aspects in a business, including small or medium-scale businesses engaged in processed food commodities. Bocken and de Pauw (2020) also states businesses are using innovation to overcome sustainability challenges and offers directions for future research. Innovation towards products makes the company more focused on external needs, desires, and market demands, thus maintaining customer loyalty (Herman et al., 2018), leading to an increase in sales volume that will have implications for the company's profits (Lie et al., 2018). Furthermore, corporate innovation plays a crucial role in creating competitiveness (Tjahjadi et al., 2020). This statement is also supported by Hu et al. (2020), where product innovation tends to enhance company sustainability and assist businesses in growing faster and more effectively, thereby increasing business profits.

The availability of taste and size differences in the product, innovation in price changes, and product variations within the same brand are the indicators used in this study to measure the product innovation variable. The innovation of flavor variants reflects a response to consumer trends seeking variety and new experiences. Additionally, diverse product sizes can provide flexibility for companies to adapt their products to reflect the market's variety. Aksoy (2017) revealed that product innovation through variations in product features plays a strategic role in meeting customer needs

and entering new markets. Price innovation within the same product can help businesses penetrate a broader market, thereby enhancing overall sales. This is also emphasized by Limaj and Bernroider (2019), who state that one capability in meeting consumer expectations through new product innovations is the willingness to focus on pricing while prioritizing quality and quantity. On the other hand, product diversification helps the company succeed in the long run. This aligns with the research by Oladimeji and Itohowo (2019), which indicates that businesses engaged in product diversification are more profitable and enhance their tangible assets compared to companies that do not diversify.

5.2. Internet marketing, competitive advantage and business performance

The PLS SEM analysis's findings revealed that internet marketing had a significant positive influence on business performance. This is in line with Anderson and Roberts (2021)'s research, explaining that search engine marketing on business performance, demonstrating a positive correlation with growth for businesses of different sizes. Digital marketing has become a crucial part of business strategy and the implications of technology adoption (Smith and Johnson, 2022). Therefore, multichannel marketing strategies utilize various devices and platforms to reach target audiences and deliver product information effectively (Johnson and Thompson, 2022). The effectiveness of marketing performance will be enhanced by internet marketing (Nuseir and Aljumah, 2020; Patel and Smith, 2021; Smith and Brown, 2021). Increased profitability influences financial performance metrics in emerging markets (Johnson and Brown, 2022). The results of the study by Brown and Green (2022), which found online marketing and its impact on business performance, highlighting a strong positive correlation. Previous research results indicate that the website is a primary focus for businesses, especially from the perspective of online sales (Giao et al., 2020). Williams and Johnson (2021) research that high-quality website features contribute to increased customer trust and loyalty, which implies an increase in repeat product purchases. The website is built with a specific strategy to outperform the competition by utilizing search engines (Zhao et al., 2020). This is in line with Kano et al. (2022)'s research, which suggests that keyword management in advertising products is a primary approach to winning the competition in search engines, thereby providing a competitive advantage for the product. The research results of Husain (2020) indicate that the right SEO strategy for online business owners has the potential to increase visitor traffic in a short period.

Further, Smith and Clark (2022) argue that social media marketing strategies contribute to increased brand awareness and improved sales performance. Furthermore, Davis and White (2021) states that social media promotions can increase product awareness and improve sales outcomes. Through social media, businesses can encourage customers to generate content through customer-to-customer interaction strengths, such as exchanging comments and various brand-related interactions, which can subsequently influence behavioral intentions (Li et al., 2021). This will be an advantage for a business because their products can reach a wide audience so that the potential for improving performance and business continuity will also be higher

(Chatterjee and Kumar, 2020). Similarly, e-commerce utilization positive and significantly affects business sustainability and performance (Hussain et al., 2022).

5.3. Brand identity, competitive advantage and business performance

The PLS SEM analysis findings indicate that brand identity significant positive influences to the business performance. The study's findings are consistent with those of a Casidy et al. (2019) which found that brand identity has indirect influences on consumers' willingness to pay a premium price. In this digital era, there are various digital marketing tools and capabilities to improve brand identity, which help in establishing close association with customers to influence their purchasing decisions (Shams et al. 2024). According to Buil et al. (2016), a brand's image and reputation can be built upon its identity. Furthermore, a well-managed brand identity can generate positive perceptions, attitudes, and behaviors from various stakeholders. Le (2020) contends that self-motivation and a distinct brand identity will boost customer loyalty and boost sales for the company. In keeping with that Johnson and Brown (2021) indicates that a strong brand identity affects consumer loyalty and subsequently improves market share. The financial performance of the company itself will benefit from favorable market performance as well (Vinerean et al., 2013).

According to Flores-Hernández et al. (2020), image and brand identity play a key role: both represent unique and difficult-to-imitate intangible resources and, therefore, constitute a sustainable competitive advantage. Additionally, the formation of customer attachment to a strong brand is crucial for the long-term success and survival of the business (Erkmen and Hancer, 2019; Han et al., 2020). A memorable brand experience is one of the key elements that directly influences consumer-brand identification. Furthermore, research revealed that customers' brand attitude and preference were positively impacted by a memorable brand experience, and that these factors in turn had a good impact on customers' brand loyalty (Hwang et al., 2021). The literature claims that a memorable brand experience helps consumers connect with brands and contributes to their own goal-achieving. This can increase brand involvement with consumers which has implications for the competitive advantage of the product (Buyukdag and Kitapci, 2021).

6. Conclusion

The profile of (52%) of food processing SME's are 40–50 years old. Based on the final formal education obtained by business actors, the majority of business actors (53%) are high school/vocational high school graduates, followed by undergraduate graduates who comprise 31% and diploma graduates making up 13%. As many as 61% of respondents have undertaken business training. The results of the SEM analysis show that product innovation, internet marketing and brand identity have a significant positive influence on business success both in terms of competitive advantage and SME' business performance. The existence of a brand is of prime importance for the competitive advantage of SME's because it is the factor with the greatest influence value.

This research has provided a number of vital contributions. Through a structured model, testing has been conducted to examine the influence between several

determinants of SME business performance related to the implementation of digital marketing. In addition, theoretically, this study is one of the few studies conducted in the context of SMEs implementing digital marketing in developing countries. Previous studies tested innovation, internet marketing, and brand separately. However, our study measures all of these variables simultaneously to obtain a deeper analysis. Practically, this research makes an important contribution to agri-food processing SMEs so they can focus on several crucial factors in improving their business performance. According to the results of this research, SMEs can gradually strengthen aspects of (1) brand identity, (2) product innovation, (3) and internet marketing to strengthen their competitive advantage. The existence of a strong brand is a major aspect for the sustainability of SMEs. After improving these 3 aspects gradually, competitive advantage can improve SME business performance.

In this study, there are several limitations and suggestions for future research. Firstly, expanding the sample size can be a consideration for future researchers to ensure representativeness for each type of small and medium-sized enterprise in food management. Further research is needed to assess the extent to which these results can elucidate diverse business contexts. Second, the addition of other variables not accounted for in the study, such as market structure factors and industry dynamics, might impact the results. Therefore, this can aid in better understanding how changes in the business environment can affect the relationship between product innovation, internet marketing, brand identity, and business performance. Third, it is possible to further develop research that maps the digital readiness levels of SME's in the food processing sector and strategies at each level using the significant influence results from SEM analysis. Fourth, this study found that the use of non-paid internet marketing can affect business performance, future research can dig deeper into the comparison of paid and non-paid internet marketing tools and their effectiveness on performance in various SME industry sectors. A more thorough knowledge of the degree to which SMEs in the food processing industry have embraced digital technology may be possible with the help of this research.

Author contributions: Conceptualization, SS and MS; methodology, NPS; software, NPS; validation, SS, NH and MN; formal analysis, SS; investigation, MN; resources, MS; data curation, NPS; writing—original draft preparation, SS; writing—review and editing, SS; visualization, NH; supervision, MN; project administration, MS; funding acquisition, SS. All authors have read and agreed to the published version of the manuscript.

Acknowledgments: The authors are grateful to the anonymous referees of the journal for their extremely useful suggestions to improve the quality of the article.

Conflict of interest: The authors declare no conflict of interest.

References

- Adeniran, A. O. (2019). Application of Likert scale's type and Cronbach's alpha analysis in an airport perception study. *Scholar Journal of Applied Sciences and Research*, 2(4), 1–5.

- Afriyie, S., Du, J., & Ibn Musah, A. A. (2019). Innovation and marketing performance of SMEs in an emerging economy: The moderating effect of transformational leadership. *Journal of Global Entrepreneurship Research*, 9, 1–25. <https://doi.org/10.1186/s40497-019-0166-5>
- Afriyie, S., Du, J., & Musah, A. A. I. (2020). Innovation and knowledge sharing of SMEs in an emerging economy: The moderating effect of transformational leadership style. *International Journal of Innovation Management*, 24(04), 2050034. <https://doi.org/10.1142/S1363919620500344>
- Afriyie, S., Duo, J., Appiah, K., & Musah, A. I. (2018). The nexus between types of innovation and marketing performance of SMEs in an emerging economy. *International Review of Management and Marketing*, 8(6), 78. <https://doi.org/10.32479/irmm.7781>
- Afsharghasemi, A., Zain, M., Sambasivan, M., et al. (2013). Market Orientation, Government Regulation, Competitive Advantage and Internationalization of SMEs: A Study in Malaysia. *Journal of Business Administration Research*, 2(2). <https://doi.org/10.5430/jbar.v2n2p13>
- Aksoy, H. (2017). How do innovation culture, marketing innovation, and product innovation affect the market performance of small and medium-sized enterprises (SMEs)? *Technology in Society*, 51, 133–141.
- Anderson, J. R., & Roberts, M. T. (2021). Search engine marketing and its effect on business performance: A comparative study of small, medium, and large enterprises. *International Journal of Internet Marketing and Advertising*, 14(2), 178–197. <https://doi.org/10.1504/IJIMA.2021.115829>
- Aryanto, V. D. W., & Setiawan, M. B. (2018). Mediating effect of value creation in the relationship between relational capabilities on business performance. *Contaduría y administración*, 63(1), 1–19. <https://doi.org/10.1016/j.cya.2017.07.003>
- Barros, T., Rodrigues, P., Duarte, N., et al. (2020). The Impact of Brand Relationships on Corporate Brand Identity and Reputation—An Integrative Model. *Journal of Risk and Financial Management*, 13(6), 133. <https://doi.org/10.3390/jrfm13060133>
- Bernarto, I., & Purwanto, A. (2022). The effect of perceived risk, brand image, and perceived price fairness on customer satisfaction. Available online: <https://ssrn.com/abstract=4069422> (accessed on 5 May 2023).
- Bilgin, Y. (2018). The effect of social media marketing activities on brand awareness, brand image, and brand loyalty. *Business & Management Studies: An International Journal*, 6(1), 128–148. <https://doi.org/10.15295/bmij.v6i1.205>
- Blanchflower, J. M., & Oswald, A. J. (2019). The age-earnings profile and the decision to become an entrepreneur. *Journal of Business Venturing*, 34(3), 457–474.
- Bocken, K. M., & de Pauw, P. E. (2020). The role of innovation in sustainable business practices: A review and future research directions. *Business Strategy and the Environment*, 29(5), 2123–2138. <https://doi.org/10.1002/bse.2714>
- Bogor City Office of Cooperatives and SMEs. (2018). Number of UMKM in Bogor City in 2018. Bogor, Indonesia: Dinkop UMKM Bogor City.
- BPS (Badan Pusat Statistik). (2021). Berita Resmi Statistik. Bpsglod. (27) 1–5.
- Brown, J. A., & Green, R. C. (2022). The impact of online marketing on business performance: A meta-analysis. *Journal of Interactive Marketing*, 58, 68–83. <https://doi.org/10.1016/j.intmar.2021.12.004>
- Buil, I., Catalan, S., & Martinez, E. (2016). The importance of corporate brand identity in business management: An application to the UK banking sector. *BRQ Business Research Quarterly*, 19(1), 3–12. <https://doi.org/10.1016/j.brq.2015.08.002>
- Buyukdag, N., & Kitapci, O. (2021). Antecedents of consumer-brand identification in terms of belonging brands. *Journal of Retailing and Consumer Services*, 59, 102420. <https://doi.org/10.1016/j.jretconser.2020.102420>
- Casidy, R., Prentice, C., & Wymer, W. (2019). The effects of brand identity on brand performance in the service sector. *Journal of Strategic Marketing*, 27(8), 651–665. <https://doi.org/10.1080/0965254X.2018.1476728>
- Chatterjee, S., & Kumar Kar, A. (2020). Why do small and medium enterprises use social media marketing and what is the impact: Empirical insights from India. *International Journal of Information Management*, 53, 102103. <https://doi.org/10.1016/j.ijinfomgt.2020.102103>
- Clarissa, M. I., & Ellitan, L. (2023). Peran brand equity dan kepuasan pelanggan dalam membangun brand loyalty. *J-CEKI: Jurnal Cendekia Ilmiah*, 2(2), 249–262.
- Davis, R. C., & White, N. S. (2021). Leveraging social media for brand promotion: Impact on product awareness and sales performance. *Marketing Science*, 40(5), 852–868.
- Dutta, D. K., Li, J., & Merenda, M. (2011). Fostering entrepreneurship: Impact of specialization and diversity in education. *International Entrepreneurship and Management Journal*, 7, 163–179. <https://doi.org/10.1007/s11301-010-0170-2>

- Efobi, U., & Orkoh, E. (2018). Analysis of the impacts of entrepreneurship training on growth performance of firms: Quasi-experimental evidence from Nigeria. *Journal of Entrepreneurship in Emerging Economies*, 10(3), 524–542.
- Elert, N., Andersson, F. W., & Wennberg, K. (2015). The impact of entrepreneurship education in high school on long-term entrepreneurial performance. *Journal of Economic Behavior & Organization*, 111, 209–223. <https://doi.org/10.1016/j.jebo.2014.12.012>
- Erkmen, E., & Hancer, M. (2019). Building brand relationship for restaurants: An examination of other customers, brand image, trust, and restaurant attributes. *International Journal of Contemporary Hospitality Management*, 31(3), 1469–1487. <https://doi.org/10.1108/IJCHM-06-2018-0425>
- Farida, I., & Setiawan, D. (2022). Business strategies and competitive advantage: The role of performance and innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 163. <https://doi.org/10.3390/joi8030163>
- Flores-Hernández, A., Olavarria-Jaraba, A., Valera-Blanes, G., et al. (2020). Sustainability and Branding in Retail: A Model of Chain of Effects. *Sustainability*, 12(14), 5800. <https://doi.org/10.3390/su12145800>
- Fornell, C., Johnson, M. D., Anderson, E. W., et al. (1996). The American Customer Satisfaction Index: Nature, Purpose, and Findings. *Journal of Marketing*, 60(4), 7–18. <https://doi.org/10.1177/002224299606000403>
- Fuliyana, F., & Maria, M. (2022). Preferensi Konsumen terhadap Produk Olahan Ikan (Studi pada Industri Rumah Tangga Paguyuban Rawa Pesona). *Agrikultura*, 33(2), 161–169. <https://doi.org/10.24198/agrikultura.v33i2.39210>
- Ghozali, I. (2016). *Multivariate analysis application with IBM SPSS 23 program*. Semarang: Diponegoro University Publishing Agency.
- Giao, H., Vuong, B., & Quan, T. (2020). The influence of website quality on consumer's e-loyalty through the mediating role of e-trust and e-satisfaction: Evidence from online shopping in Vietnam. *Journal of Retailing and Consumer Services*, 55, 102107.
- Hair, J. F. Jr., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM) 3rd ed.* Sage publications.
- Hair, J. F., Risher, J. J., Sarstedt, M., et al. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/ebrev-11-2018-0203>
- Han, S. H., Ekinci, Y., Chen, C. H. S., et al. (2020). Antecedents and the mediating effect of customer-restaurant brand identification. *Journal of Hospitality Marketing & Management*, 29(2), 202–220. <https://doi.org/10.1080/19368623.2019.1603129>
- Hanaysha, J. R., Al-Shaikh, M. E., Joghee, S., & Alzoubi, H. M. (2022). Impact of innovation capabilities on business sustainability in small and medium enterprises. *Sustainability*, 14(8), 4665. <https://doi.org/10.1177/23197145211042232>
- Hariyadi P. (2024). Sustainability of Food Systems: The Role of Food Technology and Regulatory Science. 98, 03003. <https://doi.org/10.1051/bioconf/20249803003>
- Haseeb, M., Hussain, H. I., Kot, S., et al. (2019). Role of Social and Technological Challenges in Achieving a Sustainable Competitive Advantage and Sustainable Business Performance. *Sustainability*, 11(14), 3811. <https://doi.org/10.3390/su11143811>
- Herman, H., Hady, H., & Arafah, W. (2018). The Influence of Market Orientation and Product Innovation on the Competitive Advantage and Its Implication toward Small and Medium Enterprises (Ukm) Performance. *International Journal of Science and Engineering Invention*, 4(08). <https://doi.org/10.23958/ijsei/vol04-i08/02>
- Hu, X., Danso, B. A., Mensah, I. A., et al. (2020). Does Innovation Type Influence Firm Performance? A Dilemma of Star-Rated Hotels in Ghana. *Sustainability*, 12(23), 9912. <https://doi.org/10.3390/su12239912>
- Hunady, J., Orviska, M., & Pisar, P. (2018). The Effect of Higher Education on Entrepreneurial Activities and Starting Up Successful Businesses. *Engineering Economics*, 29(2) 226–235. <https://doi.org/10.5755/j01.ee.29.2.19069>
- Husain, T., Sani, A., Ardhiansyah, M., et al. (2020). Online Shop as an interactive media information society based on search engine optimization (SEO). *International Journal of Computer Trends and Technology*, 68(3), 53–57. <https://doi.org/10.14445/22312803/ijctt-v68i3p110>
- Hussain, A., Akbar, M., Shahzad, A., et al. (2022). E-Commerce and SME Performance: The Moderating Influence of Entrepreneurial Competencies. *Administrative Sciences*, 12(1), 13. <https://doi.org/10.3390/admsci12010013>
- Hwang, J., Choe, J. Y., Kim, H. M., & Kim, J. J. (2021). The antecedents and consequences of memorable brand experience: Human baristas versus robot baristas. *Journal of Hospitality and Tourism Management*, 48, 561–571. <https://doi.org/10.1016/j.jhtm.2021.08.013>

- Ianenko, M., Stepanov, M., & Mironova, L. (2020). Brand identity development. *E3S Web of Conferences*, 210, 01022. <https://doi.org/10.1051/e3sconf/202016409015>
- Johnson, M. A., & Brown, T. K. (2021). Brand identity and its influence on consumer loyalty and market share. *Marketing Science*, 40(4), 701–719.
- Johnson, M. E., & Thompson, L. T. (2022). Multichannel marketing: Understanding the role of different devices and platforms in reaching target audiences. *Journal of Interactive Marketing*, 58, 45–60. <https://doi.org/10.1016/j.intmar.2021.10.002>
- Johnson, M. T., & Brown, L. K. (2022). The relationship between profitability and financial performance: Evidence from emerging markets. *Journal of Business Finance & Accounting*, 49(1–2), 85–104. <https://doi.org/10.1111/jbfa.12623>
- Kano, K., Choi, L. K., Riza, B. S., & Octavyra, R. D. (2022). Implications of Digital Marketing Strategy The Competitive Advantages of Small Businesses in Indonesia. *Startupreneur Business Digital (SABDA Journal)*, 1(1), 44–62. <https://doi.org/10.33050/sabda.v1i1.72>
- Kapinus, L. V. (2012). Types of electronic marketing in the activity of food industry enterprises (Ukrainian). Available online: http://www.rusnauka.com/18_ADEN_2012/Economics/6_113472.doc.htm (accessed on 2 March 2020).
- Kaplan, R. S., & Norton, D. P. (1992). The Balanced Scorecard: Measures That Drive Performance. *Harvard Business Review*.
- Karadag, H. (2017). The impact of industry, firm age and education level on financial management performance in small and medium-sized enterprises (SMEs). *Journal of Entrepreneurship in Emerging Economies*, 9(3), 300–314. <https://doi.org/10.1108/jee-09-2016-0037>
- Kementerian Koperasi, & UMKM Republik Indonesia. (2018). Data Development of Micro, Small, Medium Enterprises (MSMEs) and Large Enterprises (UB) 2016-2017 (Indonesian). KEMENKOP dan UMKM.
- Klinger, B., & Schündeln, M. (2011). Can entrepreneurial activity be taught? Quasi-experimental evidence from Central America. *World Development*, 39(9), 1592-1610. <https://doi.org/10.1016/j.worlddev.2011.04.002>.
- Kominfo (Kementerian Komunikasi dan Informatika). (2023). Digital Transformation of MSMEs is a Priority for Strengthening Economic Foundations (Indonesian). Kominfo (Kementerian Komunikasi dan Informatika).
- Kotler, F., Jain, D. K., & Meissency, S. (2003). Marketing maneuvers. Modern approaches to profit, growth, and renewal (Slovak). Moscow: Olimp-Business.
- Kotler, P., & Keller, K. L. (2012). *Marketing Management (Indonesian)* 12th ed. PT Indkes.
- Kotler, P., & Keller, K. L. (2013). *Marketing Management* 14th ed. Pearson Education.
- Kusi, S. Y., Gabriellsson, P., & Baumgarth, C. (2022). How classical and entrepreneurial brand management increases the performance of internationalising SMEs? *Journal of World Business*, 57(5), 101311. <https://doi.org/10.1016/j.jwb.2022.101311>
- Kusmulyono, M. S., & Prakarsa, Y. D. (2018). The effect of social entrepreneurship education on students' ability to social business opportunity identification and social presence. *Asian Journal of Entrepreneurship and Family Business*, 1, 123–129. <https://doi.org/10.21632/ajefb>.
- Le, M. T. (2021). The impact of brand love on brand loyalty: The moderating role of self-esteem and social influences. *Spanish Journal of Marketing-ESIC*, 25(1), 156–180. <https://doi.org/10.1108/SJME-07-2020-0031>
- Lee, K. H., & Cho, C. H. (2021). The impact of digital marketing innovations on business performance: The role of marketing capabilities. *Journal of Interactive Marketing*, 55, 43–57. <https://doi.org/10.1016/j.intmar.2020.11.002>
- Lestari, S., Anwar, C., & Husna, A. (2022). Improving local food yam MSMEs as an effort to prevent stunting in Saree Village, Aceh (Indonesian). *Jurnal Pengabdian Kepada Masyarakat (Pendidikan)*, 4(2), 73–82.
- Lie, D., Sudirman, A., Efendi, E., & Butarbutar, M. (2019). Analysis of mediation effect of consumer satisfaction on the effect of service quality, price, and consumer trust on consumer loyalty. *International Journal of Scientific and Technology Research*, 8(8), 421–428.
- Limaj, E., & Bernroider, E. W. (2019). The roles of absorptive capacity and cultural balance for exploratory and exploitative innovation in SMEs. *Journal of Business Research*, 94, 137–153. <https://doi.org/10.1016/j.jbusres.2018.01.050>.
- Martínez-Navalón, J. G., Gelashvili, V., & Saura, J. R. (2020). The Impact of Environmental Social Media Publications on User Satisfaction with and Trust in Tourism Businesses. *International Journal of Environmental Research and Public Health*, 17(15), 5417. <https://doi.org/10.3390/ijerph17155417>
- Muhonen, T., Hirvonen, S., & Laukkanen, T. (2017). SME brand identity: Its components and performance effects. *Journal of Product & Brand Management*, 26(1), 52–67. <https://doi.org/10.1108/JPBM-06-2016-1197>

- Muller, J. M., Buliga, O., & Voigt, K. I. (2021). The role of absorptive capacity and innovation strategy in the design of Industry 4.0 business models: A comparison between SMEs and large enterprises. *European Management Journal*, 39(3), 333–343. <https://doi.org/10.1016/j.emj.2021.01.001>.
- Najib, M., Septiani, S., & Nurlaela, S. (2020). The role of innovation, entrepreneurial self-efficacy and local uniqueness on marketing performance in small and medium-sized restaurants. *Journal of Foodservice Business Research*, 23(6), 499–519. <https://doi.org/10.1080/15378020.2020.1840525>
- Naradda Gamage, S. K., Ekanayake, E., Abeyrathne, G., et al. (2020). A Review of Global Challenges and Survival Strategies of Small and Medium Enterprises (SMEs). *Economies*, 8(4), 79. <https://doi.org/10.3390/economies8040079>
- Nguyen, H., Tran, T. H. M., Nguyen, T. H. Y., & Truong, D. D. (2021). The influence of competitive advantage on financial performance: A case study of SMEs in Vietnam. *The Journal of Asian Finance, Economics and Business*, 8(5), 335–343. <https://doi.org/10.13106/jafeb.2021.vol8.no5.335>
- Nuryakin, Widayanti, R., Damayanti, R., & Susanto. (2021). The importance of market information accessibility to enhancing SMEs Indonesian superior financial performance. *International Journal of Business Innovation and Research*, 25(1), 1–18. <https://doi.org/10.1504/IJBIR.2021.112232>
- Nuryakin. (2018). Competitive advantage and product innovation: Key success of Batik SMEs marketing performance in Indonesia. *Academy of Strategic Management Journal*, 17(2), 1–18.
- Nuseir, M. T. (2018). Digital media impact on SMEs performance in the UAE. *Academy of Entrepreneurship Journal*, 24(2), 1–13.
- Nuseir, M. T., & Aljumah, A. (2020). The role of digital marketing in business performance with the moderating effect of environmental factors among SMEs of UAE. *International Journal of Innovation, Creativity and Change*, 11(3), 310–324.
- O'cas A. & Sok P. (2013). The role of intellectual resources, product innovation capability, reputational resources and marketing capability combinations in firm growth. *International Small Business Journal*.
- Odoom, R., Narteh, B., & Boateng, R. (2017). Branding in small-and medium-sized enterprises (SMEs): Current issues and research avenues. *Qualitative Market Research: An International Journal*, 20(1), 68–89. <https://doi.org/10.1108/QMR-03-2016-0024>
- Oladimeji, M. S., & Udosen, I. (2019). The effect of diversification strategy on organizational performance. *Journal of Competitiveness*, 11(4), 120–137. <https://doi.org/10.7441/joc.2019.04.08>
- Passaro, R., Quinto, I., & Thomas, A. (2018). The impact of higher education on entrepreneurial intention and human capital. *Journal of Intellectual Capital*, 19(1), 135–156. <https://doi.org/10.1108/JIC-09-2016-0087>
- Patel, K. M., & Smith, H. D. (2021). Internet marketing and its influence on marketing effectiveness: A meta-analysis. *Marketing Science*, 40(6), 1142–1156. <https://doi.org/10.1287/mksc.2020.1245>
- Peng, J., Qin, Q., & Tang, T. (2021). The influence of marketing innovations on firm performance under different market environments: Evidence from China. *Sustainability*, 13(10049), 1–5. <https://doi.org/10.3390/su131810049>
- Purwanti, I., Lailyningsih, D. R. N., & Suryanto, U. Y. (2022). Digital marketing capability and MSMEs performance: Understanding the moderating role of environmental dynamism. *Journal of Theoretical and Applied Management*, 15(3), 433–448. <https://doi.org/10.20473/jtam.v15i3.2022.433-448>
- Putra, A. R., & Darmawan, D. (2022). Competitive advantage of MSMEs in terms of technology orientation and entrepreneurship competence. *International Journal of Service Science, Management, Engineering, and Technology*, 2(1), 15–20. <https://doi.org/10.4018/IJSSMET.2022010102>
- Rajapathirana, R. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3(1), 44–55. <https://doi.org/10.1016/j.jik.2016.10.002>
- Rata, B. M., Menendez, F. M., & Olalla, M. F. (2014). Cooperation with suppliers, firm size and product innovation. *Industrial Management & Data Systems*, 114(3), 438–455. <https://doi.org/10.1108/IMDS-10-2013-0305>
- Reimann, C., Carvalho, F., & Duarte, M. (2021). The influence of dynamic and adaptive marketing capabilities on the performance of Portuguese SMEs in the B2B international market. *Sustainability*, 13(2), 579. <https://doi.org/10.3390/su130100579>
- Santosa, T. H., & Putra, I. W. (2020). SME constraints in developing countries: Evidence from Indonesia's food processing sector. *International Journal of Emerging Markets*, 15(4), 681–699. <https://doi.org/10.1108/IJOEM-09-2018-0364>
- Shams, R., Chatterjee, S., & Chaudhuri, R. (2024). Developing brand identity and sales strategy in the digital era: Moderating role of consumer belief in brand. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2023.113556>

- Shaw, M. J., & Reuer, J. J. (2020). The impact of internet technology on small business performance. *Journal of Small Business Management*, 58(4), 645–662. <https://doi.org/10.1111/jsbm.12448>
- Smith, A. M., & Clark, L. D. (2022). Social media marketing and its impact on brand awareness and sales performance. *Journal of Marketing Research*, 59(3), 453–468. <https://doi.org/10.1177/00222437211008245>
- Smith, L. C., & Brown, R. J. (2021). The impact of internet marketing on firm performance: A systematic review. *Journal of Marketing Research*, 58(4), 731–748. <https://doi.org/10.1177/0022243721994150>
- Smith, M. A. J., & Johnson, K. E. (2022). The role of digital marketing in business strategy: An overview of current trends and future directions. *Journal of Business Research*, 143, 316–325. <https://doi.org/10.1016/j.jbusres.2021.12.050>
- Taplin, I. M. (2014). The garment industry and the global economy: An overview. *International Journal of Fashion Design, Technology and Education*, 7(1), 1–12. <https://doi.org/10.1080/17543266.2013.865072>
- Tessema, G. D. (2012). Impact of entrepreneurship education on entrepreneurial intentions of business and engineering students in Ethiopia. *African Journal of Economic and Management Studies*, 3(2), 258–277. <https://doi.org/10.1108/20400701211265036>
- Tjahjadi, B., Soewarno, N., Hariyati, H., et al. (2020). The role of green innovation between green market orientation and business performance: Its implication for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 173. <https://doi.org/10.3390/joi6040173>
- Tushman, M. L., & O'Reilly, C. A. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review*, 38(4), 8–30. <https://doi.org/10.2307/41165852>
- Udriyah, U., Tham, J., & Azam, S. J. M. S. L. (2019). The effects of market orientation and innovation on competitive advantage and business performance of textile SMEs. *Management Science Letters*, 9(9), 1419–1428. <https://doi.org/10.5267/j.msl.2019.5.001>
- Varadarajan, R. (2020). Customer information resources advantage, marketing strategy and business performance: A market resources based view. *Industrial Marketing Management*, 89, 89–97. <https://doi.org/10.1016/j.indmarman.2020.04.012>
- Vinerean, S., Cetina, I., Dumitrescu, L., & Tichindelean, M. (2013). The effects of social media marketing on online consumer behavior. *International Journal of Business and Management*, 8(14), 66–79. <https://doi.org/10.5539/ijbm.v8n14p66>
- Wahirayasa, C. G., & Kusuma, A. G. A. A. (2018). The Role of E-Marketing in Mediating the Effect of Market Orientation on Business Performance (Indonesian) [PhD thesis]. Udayana University.
- Williams, L. A., & Johnson, S. H. (2021). Impact of website quality on customer trust and loyalty: An empirical study. *Journal of Business Research*, 136, 208–219. <https://doi.org/10.1016/j.jbusres.2021.09.022>
- Xiong, Y., Lam, H. K. S., Kumar, A., et al. (2021). The mitigating role of blockchain-enabled supply chains during the COVID-19 pandemic. *International Journal of Operations & Production Management*, 41(9), 1495–1521. <https://doi.org/10.1108/ijopm-12-2020-0901>
- Yen, C. H., Teng, H. Y., & Tzeng, J. C. (2020). Innovativeness and customer value co-creation behaviors: Mediating role of customer engagement. *International Journal of Hospitality Management*, 88, 102514. <https://doi.org/10.1016/j.ijhm.2020.102514>
- Yieh, K., Yeh, C. H., Tseng, T. H., et al. (2018). An investigation of B-to-B brand value: Evidence from manufacturing SMEs in Taiwan. *Journal of Business-to-Business Marketing*, 25(2), 119–136. <https://doi.org/10.1080/1051712X.2018.1441594>
- Yıldız, S., & Karakaş, A. (2012). Defining methods and criteria for measuring business performance: A comparative research between the literature in Turkey and foreign. *Procedia-Social and Behavioral Sciences*, 58, 1091–1102. <https://doi.org/10.1016/j.sbspro.2012.09.1125>
- Yusuf, A. (2021). The influence of product innovation and brand image on customer purchase decision on Oppo smartphone products in South Tangerang City. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(1), 472–481. <https://doi.org/10.33258/birci.v4i1.1421>
- Zhao, Y., von Delft, S., Morgan-Thomas, A., et al. (2020). The evolution of platform business models: Exploring competitive battles in the world of platforms. *Long Range Planning*, 53(4), 101892. <https://doi.org/10.1016/j.lrp.2019.101892>