

SYNERGY EFFECT OF INNOVATION AS AN ENABLER OF THE FIRM PERFORMANCE: SME'S CULINARY INDUSTRY

¹Ma'ruf Ma'ruf, ²Ratni Prima Lita, ³Meuthia, ⁴M. Fajar Syafrida

¹maruf@eb.unand.ac.id

^{1,2,4}Universitas Andalas

Jl. Dr. Mohammad Hatta, Limau Manis, Kec. Pauh, Kota Padang, Sumatera Barat 25175,
Indonesia

³Universiti Teknologi Malaysia

Blok T08, Pejabat Pos Universiti Teknologi Malaysia, 81310 Johor Bahru, Johor,
Malaysia

received: 13/2/25; revised: 11/12/25; approved: 15/12/25

Abstract

This study investigates the relationships among organizational innovation, marketing innovation, product innovation, and firm performance in the food industry in West Sumatra Province, Indonesia. The population of this study consists of small food souvenir businesses operating in the region. Data were collected from 150 respondents using a purposive sampling method, and analyzed using the structural equation modelling-partial least squares (SEM-PLS) with SmartPLS 3.0 software. The study's results revealed that organizational and product innovation did not significantly and positively impact firm performance. However, marketing innovation positively and significantly impacted product innovation and firm performance. Marketing innovation did not moderate the relationship between product innovation and firm performance in the food industry. The results imply that it is important for business actors to strengthen organizational and human resource development, as well as product development, which is more impactful on performance.

Keywords: organizational innovation; product innovation; marketing innovation; firm performance

INTRODUCTION

The culinary industry is one of the 16 sub-sectors that make up Indonesia's creative industry. It involves businesses that produce local specialties and market these products nationwide. Integrating the culinary industry into the creative sector highlights the value added to products by industry players, such as innovative processing methods, unique recipes, and distinctive serving techniques. This sector is experiencing rapid growth and ranks among the three leading creative industry sub-sectors, alongside fashion and crafts, which are actively supported and developed by the Ministry of Industry.

In accordance with the policies of the Republic of Indonesia's Ministry of Industry, the West Sumatra government has identified the culinary industry as one of its nine key sub-sectors. West Sumatra, one of Indonesia's provinces, is known for its rich culinary heritage, particularly the local cuisine of the Minangkabau ethnic group, which has received national and international recognition.

In 2011, CNN readers voted "rendang," a local dish, as the best food in the world, which significantly boosted its reputation.

The culinary diversity of West Sumatra is a significant attraction for both domestic and international tourists. Data from the Central Statistics Agency (BPS) show a significant increase in interest in visiting West Sumatra, where domestic tourism in the two years increased from 12,823,340 in 2023 to 17,830,856 in 2024.

Table 1 presents the number of foreign tourists who arrived in West Sumatra via Minangkabau International Airport from 2019 to 2024.

Table 1. Number of Foreign Tourists Coming to West Sumatra

Year	Number of Foreign Tourists
2019	61.131
2020	10.875
2021	-
2022	4.144
2023	56.645
2024	76.753

Source: Indonesian Central Bureau of Statistics (2025)

Interviews with several culinary businesses in West Sumatra show that sales of local specialty food souvenirs have significantly increased productivity. Furthermore, an increase in sales is expected to improve the overall performance of these businesses and create opportunities for food souvenir shops that highlight West Sumatra's distinct offerings. This trend has prompted shopkeepers to start implementing innovations in their businesses. The total number of small and medium-sized enterprises increased from 87,884 in 2022 to 88,22 in 2023, reflecting the sector's growth potential (Yeni, 2024).

The increase in the number of businesses leads in greater competition. Meanwhile, rivalry in this sub-sector is increasing due to the entry of a new business model called "artist cake". The business is owned or endorsed by Indonesian artists, combining traditional food souvenirs with unique creations, and leveraging their popularity. The rise of artist cakes that claim to be souvenirs of West Sumatra obviously poses a new threat to traditional souvenir shops. Additionally, consumer preferences and demands are constantly evolving. The growing number of businesses, new business models, and changes in customer preferences have intensified rivalry and challenges, pushing business owners to be more innovative to survive.

Employee training is a common way for small and medium-sized businesses (SME) owners to implement innovation. The training covers the creation of new products, modifications of existing products, and the generation of new ideas. It supports and motivates employees to contribute innovative concepts (Anggraeni et al., 2017). As noted by Munawar et al. (2023), through training, SMEs can quickly adapt to external changes, find innovative solutions, and maintain agile work processes. For example, in the food industry, employees receive training to modify traditional dishes by introducing new flavor variants and using different raw materials. This encouragement affects firm performance (Priyadarshini et al., 2019). The food industry constantly improves its marketing activities in line with market trends through various digital platforms, by collaborating with travel agents, adjusting prices and flavors, developing new product variants that consumers demand, and offering attractive packaging in various sizes. This improvement will promote product innovation and enhance firm performance (Gemina et al., 2019; Lestari et al., 2020; Sarkar and Costa, 2008).

The interplay of organizational innovation, product innovation, marketing innovation, and firm performance is critical for commercial success, especially in niche markets like West Sumatra's souvenir industry. According to Lin et al. (2008), a company's performance is inextricably linked to its ability to achieve internal and external goals, emphasizing the importance of sound marketing strategies to supplement new product development and modifications. Firm performance represents

the outcomes achieved in pursuit of both internal and external objectives, effectively measuring how successfully a company is meeting its defined goals (Lin et al., 2008; Suhag et al., 2017).

Jimenez and Valle (2011) and Pratama et al. (2022) emphasize that innovation is essential for a company's longevity and competitiveness. This is further supported in the works of Atalay et al. (2013), Prajogo (2016), and Bigliardi et al. (2020), which assert that product innovation directly influences firm performance. Suhag et al. (2017) further delineate product innovation as encompassing the discovery of novel products, improvements in quality, and the introduction of unique materials and functionalities into existing products. Innovation through more environmentally friendly packaging also affects competitive advantage and business performance (Maziriri, 2020).

According to Shanker et al. (2017), organizational innovation refers to a company's willingness to experiment with new ideas and practices. Companies that embrace organizational innovation will benefit from a better understanding of their strategic direction and management capabilities, which can help them achieve first-mover advantages in product and service commercialization (Rajapathirana and Hui, 2018). Organizational innovation pushes the creation of a conducive working environment and increases firm performance (Azar and Ciabuschi, 2017; García-Morales et al., 2012; Hafeez et al., 2012; Hassim et al., 2011; Mothe and Uyen Nguyen Thi, 2010; Prange and Pinho, 2017; Rhee et al., 2010; Rosenbusch et al., 2011).

Marketing innovation enables new communication methods, branding strategies, offering designs, and transaction settings (Purchase and Volery, 2020). Marketing innovation positively influences product innovation (Ajayi and Morton, 2015; Aksoy, 2017; Ramirez et al., 2018; Ganzer et al., 2017). According to Gunday et al. (2011), marketing innovation serves as a moderator that enhances the relationship between innovation and firm performance—additionally, Zhang et al. (2017) and Lee et al. (2019) demonstrate that marketing innovation is positively related to firm performance, as well as showing a positive correlation between new product development and overall performance.

In the context of West Sumatra's traditional food souvenirs, product innovation can take the form of incorporating new equipment or substituting materials to create distinct flavors. Product innovation is one of the most significant sources of competitive advantage (Camisón and Villar-López, 2014). Product innovations are strategic efforts to increase customer satisfaction and expand market share; improved comfort and a broader market presence ultimately yield significant benefits for the firm. Lita et al. (2018), Badriah et al. (2021), and Widiartanto and Suhadak (2013) highlight that practical product innovation allows companies to replace outdated offerings, broaden their product ranges, and enhance design features. Research by Lee et al. (2017), Saedi and Othman (2017), and Lee et al. (2019) reinforces the notion that such product innovations yield positive outcomes on firm performance.

Based on the preceding discussion, the current study seeks to investigate the complex relationships between organizational innovation, marketing innovation, product innovation, and firm performance in souvenir businesses in West Sumatra, in order to provide insights for improving competitive positioning in this specialized market segment.

METHODS

This research is explanatory, focusing on analyzing the relationships between one variable and others, and how a variable impacts other variables (Sekaran and Bougie, 2011). A quantitative approach is used to observe, collect data, and present the findings. This study's unit of analysis is organizations, specifically industrial centers in West Sumatra that produce typical food souvenirs. The independent variables include organizational, marketing, and product innovation. Marketing innovation is a moderating variable, while firm performance is the dependent variable. Data were gathered using questionnaires with 5-point Likert scale variables.

Data collection was carried out using Likert-scale questionnaires, and the sampling technique employed was purposive sampling, which involves selecting samples based on specific criteria

(Sekaran and Bougie, 2011). The sampling criteria included businesses that sell typical West Sumatra food souvenirs and hold valid business licenses. The population for this study comprises all food industries located in Padang City, Pariaman City, Padang Pariaman Regency, Padang Panjang City, Agam Regency, Bukittinggi City, Limapuluh Kota Regency, and Payakumbuh City in West Sumatra.

The minimum sample size was determined by multiplying the number of indicators by 5-10 (Hair et al., 2016). In this study, 105 food business leaders were selected as respondents and completed the questionnaires. Latent constructs must be measured by one or more indicators (Hair et al., 2016). Constructs for the variables are presented in Table 2. Structural equation modeling-partial least squares (SEM-PLS) was used to analyze data.

Table 2. Constructs for Variables

Constructs	Scale	Sources
<i>Organizational Innovation</i>		
Companies tend to improve work practices.	Likert 1-5	Widiartanto and Suhadak (2013)
Companies train employees regularly.		
Companies always create new products.		
Companies constantly modify new products.		
Companies always develop new ideas.		
Companies always support employee initiatives.		
<i>Product Innovation</i>	Likert 1-5	Bao et al. (2017)
Our company introduces innovative products with entirely new attributes to the market.		
Our new products are highly innovative in meeting customer needs.		
Our company often adopts new ideas in developing new products.		
Our company quickly introduces new products to the market.		
<i>Marketing Innovation</i>	Likert 1-5	Gunday et al. (2011)
Updating product promotion techniques used for current and/or new products		
Updating product pricing techniques used to determine prices for current and/or new products		
Updating the design of current and/or new products through changes such as appearance, packaging, shape, and volume without altering their basic technical and functional features.		
Updating general marketing management activities.		
<i>Firm Performance</i>	Likert 1-5	Im et al. (2016)
Our company is making efforts to reduce costs.		
Our company's productivity has increased over the past two years.		
Overall, our company has good work quality.		
Our company has achieved a high level of customer satisfaction.		

Source: Authors' own work

RESULTS

The majority of respondents stated that the majority of those who manage food industry establishments (souvenir centers) are female. One reason many women lead this business is that they tend to have cooking and culinary hobbies. More respondents over 50 years old run this business because they already have experience managing the industry, especially in financial management and business capital turnover. The old company's standing was dominant, with a 6- to 20-year history. The reason is that this business is a family effort from the business owner's parents. The number of employees working for this business is less than ten people (classified as small businesses) with a turnover of less than IDR300.000.000. Food businesses (souvenir centers) in West Sumatra are quite developed, as some companies have entered into cooperation in receive contracts to order products. The assets owned by this food business range from IDR50.000.000 to IDR500.000.000. Generally,

the target market for product sales is that most of them are still in Sumatra. Still, several businesses have been able to market their products directly to consumers overseas outside Sumatra.

Data processing in the current study uses the smartPLS 3.0 M3 application via a bootstrap procedure with 5,000 iterations to test hypotheses. Before getting the results of the hypotheses, this study assessed the predictive strength of the proposed model using the described variance value (R-square). This R-squared value is used to determine the influence of the variables. Table 3 shows the results of the R-squared in this study.

Table 3. Structural Model Test

Dependent Variable	R-square
Firm Performance	0.233
Product Innovation	0.405

Source: Authors' own work

According to Table 3, the R-square for firm performance is 0.233, indicating that organizational, marketing, and product innovation account for 23.3% of firm performance. According to the findings, marketing innovation accounts for 40.5% of product innovation, with an R-squared value of 0.405. The remaining factors influencing product innovation are not discussed in this study. In addition, the current study tests hypotheses using path coefficients; significant conditions are indicated by t-statistic values that exceed the t-value from the t-table. With a significance level of 0.05 ($\alpha = 5\%$), the t-table value used is 1.645. In this study, the moderating effects of marketing innovation on the relationship between innovative products and firm performance are tested (Hypothesis 3). To test hypothesis 3, it is necessary to examine the relationship between direct product innovation and firm performance without first controlling for marketing innovation. This step aims to see whether the relationship is significant because the condition of the moderating effect is that the relationship of the intended variable must be considerable (Ajayi and Morton, 2015). The following results of direct processing of relations are shown in Table 4.

Table 4. Testing of Structural Model (Hypotheses Testing)

Hypothesis	Path Coefficient	P-value	T-statistic	Decision
$H_1 = \text{Organizational Innovation} \rightarrow \text{Firm Performance}$	0,192	0,101	1,460	Not Supported
$H_2 = \text{Marketing Innovation} \rightarrow \text{Product Innovation}$	0,636	0,000	9,145	Supported
$H_3 = \text{Product Innovation} \rightarrow \text{Firm Performance} * \text{Marketing Innovation}$	-0,020	0,072	0,154	Not Supported
$H_4 = \text{Marketing Innovation} \rightarrow \text{Firm Performance}$	0,405	0,010	2,721	Supported
$H_5 = \text{Product Innovation} \rightarrow \text{Firm Performance}$	-0,099	0,095	0,733	Not Supported

Source: Authors' own work

Table 4 shows that the direct relationship between product innovation and firm performance is negative and insignificant, as evidenced by the small t-statistic value, which is less than the t-table value (1.645). Thus, no moderating effect exists in this study, and hypothesis 3 is rejected. Positive sample original values indicate a positive relationship between variables, whereas negative sample original values imply the opposite. Table 3 shows that the t-statistics for Hypotheses 2 and 4 are significantly larger than the t-table values. This finding suggests that the relationships between the tested variables are both positive and significant. In contrast, the t-statistics for Hypothesis 1 and Hypothesis 5 are less than the t-table values, indicating that the relationships are not significant.

Based on the data presented in Table 3, we conclude that marketing innovation is positive and significantly affects product innovation and firm performance, thereby supporting Hypothesis 2 and Hypothesis 4. However, since the influence of organizational innovation and product innovation on firm performance is not significant, Hypothesis 1 and Hypothesis 5 are rejected.

DISCUSSION

This study thoroughly examines the impact of organizational innovation on firm performance, the role of marketing innovation in improving product innovation and overall firm performance, and the moderating effect of marketing innovation on the relationship between product innovation and firm performance. Two of the five proposed hypotheses were found to be statistically significant, while the other three were not.

Notably, the findings indicate that organizational innovation does not exert a significant effect on firm performance, corroborating prior research by Giniuniene and Jurksiene (2015), Ali et al. (2016), and Phan (2019), which similarly concluded that organizational innovation does not significantly enhance firm performance. In this study, the SMEs' culinary industry still lacks digitalization, even though it is very important in improving firm performance. Conversely, the study found that marketing innovation positively affects product innovation, aligning with evidence presented by Ajayi and Morton (2015) and Aksoy (Aksoy, 2017). This result suggests that the efforts by typical West Sumatran food businesses to innovate design elements—such as appearance and product form—without changing their fundamental function can stimulate the rapid introduction of new products to the market, potentially increasing sales volume and fostering significant product innovation.

However, the research reveals that neither organizational nor product innovation has been executed to an optimal degree, thus failing to enhance organizational performance. Moreover, marketing innovation does not serve as a moderating variable between product innovation and firm performance, in contrast to previous findings by Gunday et al. (2011), who highlighted marketing innovation's mediating role in this context. Jung and Shegai (2023) in their study found that digital marketing innovation and marketing capability have significant direct and indirect effects on firm performance, with the indirect effects greater than the direct effects, indicating that marketing capability is an important factor in determining firm performance. In this study, the lack of effective marketing strategies to support innovative product offerings—ranging from unique products to product modifications and rapid introductions—suggests that without strong marketing activities, improvements in product innovation are insufficient to drive overall company performance. As a result, the food industry must step up its marketing efforts in the future.

On the other hand, marketing innovation is found to have a positive and significant impact on product innovation and firm performance, confirming previous findings (Aksoy, 2017). SMEs in the culinary industry in West Sumatra achieve maximum product innovation and company performance, especially when they implement innovative marketing strategies (e.g., updating the design of current and/or new products through changes such as appearance, packaging, shape, and volume without altering their basic technical and functional features; updating product promotion techniques used for current and/or new products).

In this study, product innovation does not show a significant association with improved firm performance among SMEs, supporting the previous study by Yulianto and Supriono (2023). This outcome contrasts with previous research by Atalay et al. (2013), Saeidi and Othman (2017), Zhang et al. (2017), and Najib and Kiminami (2011), which consistently identified a positive relationship between these variables. The divergence may be attributed to the unique characteristics of the industries examined, as earlier studies predominantly concentrated on manufacturing settings.

Furthermore, the cultural context of West Sumatra, known for its authentic Minang cuisine, may influence consumer preferences. Tourists may prefer traditional tastes over innovative variations that could dilute authenticity. The findings indicate that product innovation has little impact on firm performance, indicating a narrow focus on core product benefits.

In response to the narrow focus of innovation on core benefits, businesses may consider redirecting their efforts toward packaging improvements. Given the region's specialty foods, which are rich in unique spices, improving packaging with more educational information could increase perceived taste value and positively influence consumer behavior (Araya et al., 2022). Furthermore,

product innovation can address concerns about producing healthier options by providing the required information through appropriate media channels to convince consumers of the benefits. Lastly, the innovation should encompass advancements in packaging materials that are both hygienic and environmentally sustainable (Maziriri, 2020).

Furthermore, the competitive landscape of the typical West Sumatra food souvenir market exacerbates the relationship between product innovation and firm performance. The proliferation of similar businesses in recent years has increased competition, reducing the effectiveness of product innovation in improving business performance. As Prajogo (2016) suggests that, in highly competitive environments where consumers have numerous options, the incremental benefits of product innovation may diminish, with purchasing decisions increasingly influenced by price rather than innovation novelty. Consequently, firms in this sector must navigate these challenges to optimize their innovation strategies.

CONCLUSIONS

The study examines the relationships among organizational innovation, marketing innovation, product innovation, and firm performance in the West Sumatran food industry. The findings presented earlier in this study suggest that marketing innovation has a positive and significant impact on product innovation. Additionally, marketing innovation has a significant impact on firm performance. This suggests that marketing innovations in the food industry help improve product innovation and overall industry performance. In contrast, organizational and product innovation have no significant impact on firm performance. This study only focuses on the SMEs' culinary industry in West Sumatra Province, with a minimum sample size. Understanding the distinct characteristics of traditional West Sumatra cuisine produced by small and medium-sized enterprises (SMEs) yields valuable organizational and product innovations. According to the research findings, these companies' marketing innovations had a positive impact on organizational performance. However, neither product nor organizational innovation has significantly increased overall firm performance. As a result, it is recommended that the West Sumatran food industry continue to seek guidance and support from government bodies, local authorities, universities, and both public and private organizations.

REFERENCES

Ajayi, O. M., and Morton, S. C. (2015). Exploring the Enablers of Organizational and Marketing Innovations in SMEs: Findings From South-Western Nigeria. *Sage Open*, 5(1), 2158244015571487. <https://doi.org/10.1177/2158244015571487>

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. <https://doi.org/10.1016/j.techsoc.2017.08.005>

Ali, M., Seny Kan, K. A., and Sarstedt, M. (2016). Direct and Configurational Paths of Absorptive Capacity and Organizational Innovation to Successful Organizational Performance. *Journal of Business Research*, 69(11), 5317–5323. <https://doi.org/10.1016/j.jbusres.2016.04.131>

Anggraeni, A. I., Dwiatmadja, C., and Yuniawan, A. (2017). The Role of Psychological Contract on Employee Commitment and Organisational Citizenship Behaviour: A Study of Indonesian Young Entrepreneurs in Management Action. *SA Journal of Industrial Psychology*, 43(0), Article 0. <https://doi.org/10.4102/sajip.v43i0.1409>

Araya, S., Elberg, A., Noton, C., and Schwartz, D. (2022). Identifying Food Labeling Effects on Consumer Behavior. *Marketing Science*, 41(5), 982–1003. <https://doi.org/10.1287/mksc.2022.1356>

Atalay, M., Anafarta, N., and Sarvan, F. (2013). The Relationship between Innovation and Firm Performance: An Empirical Evidence from Turkish Automotive Supplier Industry. *Procedia - Social and Behavioral Sciences*, 75, 226–235. <https://doi.org/10.1016/j.sbspro.2013.04.026>

Azar, G., and Ciabuschi, F. (2017). Organizational Innovation, Technological Innovation, and Export Performance: The Effects of Innovation Radicalness and Extensiveness. *International Business Review*, 26(2), 324–336. <https://doi.org/10.1016/j.ibusrev.2016.09.002>

Badriah, L. S., Arintoko, A., and Rahajuni, D. (2021). Business Efficiency and Business Performance of Coconut Sugar SMEs in Banyumas Regency. *Trikonomika*, 20(2), 82-89. <https://doi.org/10.23969/trikonomika.v20i2.4477>

Bao, Y., Li, Y., Pang, C., Bao, Y., and Yi, X. (2017). Do Resource Differences Between Manufacturers and Suppliers Help or Hinder Product Innovation of Manufacturers? The Moderating Role of Trust and Contracts. *Industrial Marketing Management*, 64, 79-90. <https://doi.org/10.1016/j.indmarman.2017.02.004>

Bigliardi, B., Ferraro, G., Filippelli, S., and Galati, F. (2020). The Influence of Open Innovation on Firm Performance. *International Journal of Engineering Business Management*, 12, 1847979020969545. <https://doi.org/10.1177/1847979020969545>

Camisón, C., and Villar-López, A. (2014). Organizational Innovation as an Enabler of Technological Innovation Capabilities and Firm Performance. *Journal of Business Research*, 67(1), 2891–2902. <https://doi.org/10.1016/j.jbusres.2012.06.004>

Ganzer, P. P., Chais, C., and Olea, P. M. (2017). Product, Process, Marketing and Organizational Innovation in Industries of the Flat Knitting Sector. *RAI Revista de Administração e Inovação*, 14(4), 321–332. <https://doi.org/10.1016/j.rai.2017.07.002>

García-Morales, V. J., Jiménez-Barriidue, M. M., and Gutiérrez-Gutiérrez, L. (2012). Transformational Leadership Influence on Organizational Performance Through Organizational Learning and Innovation. *Journal of Business Research*, 65(7), 1040–1050. <https://doi.org/10.1016/j.jbusres.2011.03.005>

Gemina, D., Harini, S., and Sudarijati, S. (2019). Assessment of Entrepreneurial Marketing Performance in Small and Medium Food and Non-Food Industry in Indonesia Using IPA Analysis. *Jurnal Aplikasi Manajemen*, 17(3), 530–544. <https://doi.org/10.21776/ub.jam.2019.017.03.18>

Giniuniene, J., and Jurksiene, L. (2015). Dynamic Capabilities, Innovation and Organizational Learning: Interrelations and Impact on Firm Performance. *Procedia - Social and Behavioral Sciences*, 213, 985–991. <https://doi.org/10.1016/j.sbspro.2015.11.515>

Gunday, G., Ulusoy, G., Kilic, K., and Alpkan, L. (2011). Effects of Innovation Types on Firm Performance. *International Journal of Production Economics*, 133(2), 662–676. <https://doi.org/10.1016/j.ijpe.2011.05.014>

Hafeez, M. H., Shariff, M. N. M., and Lazim, H. bin M. (2012). Relationship between Entrepreneurial Orientation, Firm Resources, SME Branding and Firm's Performance: Is Innovation the Missing Link? *American Journal of Industrial and Business Management*, 02(04), Article 04. <https://doi.org/10.4236/ajibm.2012.24020>

Hair, J. F., Hult, G. T. M., Ringle, C., and Sarstedt, M. (2016). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). *SAGE Publications*.

Hassim, A. A., Abdul-Talib, A.-N., Rahim, A., and Abu Bakar, A. R. (2011). The Effects of Entrepreneurial Orientation on Firm Organisational Innovation and Market Orientation Towards Firm Business Performance. *IACSIT Press*.

Im, T., Campbell, J. W., and Jeong, J. (2016). Commitment Intensity in Public Organizations: Performance, Innovation, Leadership, and PSM. *Review of Public Personnel Administration*, 36(3), 219-239. <https://doi.org/10.1177/0734371X13514094>

Jung, S. U., & Shegai, V. (2023). The Impact of Digital Marketing Innovation on Firm Performance: Mediation by Marketing Capability and Moderation by Firm Size. *Sustainability*, 15(7), 5711.

Lee, R., Lee, J.-H., and Garrett, T. C. (2019). Synergy Effects of Innovation on Firm Performance. *Journal of Business Research*, 99, 507–515. <https://doi.org/10.1016/j.jbusres.2017.08.032>

Lestari, S. D., Leon, F. M., Widyastuti, S., Brabo, N. A., and Putra, A. H. P. K. (2020). Antecedents and Consequences of Innovation and Business Strategy on Performance and Competitive

Advantage of SMEs. *The Journal of Asian Finance, Economics and Business*, 7(6), 365–378. <https://doi.org/10.13106/jafeb.2020.vol7.no6.365>

Lin, C., Peng, C., and Kao, D. T. (2008). The Innovativeness Effect of Market Orientation and Learning Orientation on Business Performance. *International Journal of Manpower*, 29(8), 752–772. <https://doi.org/10.1108/01437720810919332>

Lita, R., Meuthia, M., Faisal, R., and Surya, S. (2018). SME's Innovative Performance in Indonesia: The Linkage between Innovation Culture and Production Performance. *International Journal of Supply Chain Management*, 7.

Maziriri, E. T. (2020). Green Packaging and Green Advertising as Precursors of Competitive Advantage and Business Performance Among Manufacturing Small and Medium Enterprises in South Africa. *Cogent Business & Management*, 7(1), 1719586. <https://doi.org/10.1080/23311975.2020.1719586>

Mothe, C., and Uyen Nguyen Thi, T. (2010). The Link Between Non-Technological Innovations and Technological Innovation. *European Journal of Innovation Management*, 13(3), 313–332. <https://doi.org/10.1108/14601061011060148>

Munawar, F., Kaniawati, K., Latifah, I., and Buana, D. M. A. (2023). Achieving Performance Through Strategic Agility and Entrepreneurial Innovation: An Empirical Research in SMEs Sector. *Jurnal Aplikasi Manajemen*, 21(1), 25–41. <https://doi.org/10.21776/ub.jam.2023.021.1.03>

Najib, M., and Kiminami, A. (2011). Innovation, Cooperation and Business Performance. *Journal of Agribusiness in Developing and Emerging Economies*, 1(1), 75–96. <https://doi.org/10.1108/20440831111131523>

Phan, T. T. A. (2019). Does Organizational Innovation Always Lead to Better Performance? A Study of Firms in Vietnam. *Journal of Economics and Development*, 21(1), 71–82.

Prajogo, D. I. (2016). The Strategic Fit Between Innovation Strategies and Business Environment in Delivering Business Performance. *International Journal of Production Economics*, 171, 241–249. <https://doi.org/10.1016/j.ijpe.2015.07.037>

Prange, C., and Pinho, J. C. (2017). How Personal and Organizational Drivers Impact on SME International Performance: The Mediating Role of Organizational Innovation. *International Business Review*, 26(6), 1114–1123. <https://doi.org/10.1016/j.ibusrev.2017.04.004>

Pratama, A. R., Moeljadi, M., and Rofiq, A. (2022). The Effects of Entrepreneurial Skills on Competitiveness at SMEs of Tempe Chips: The Role of Innovation Ability. *Jurnal Aplikasi Manajemen*, 20(3), 711–720. <https://doi.org/10.21776/ub.jam.2022.020.03.18>

Priyadarshini, A., Rajauria, G., O'Donnell, C. P., and Tiwari, B. K. (2019). Emerging Food Processing Technologies and Factors Impacting Their Industrial Adoption. *Critical Reviews in Food Science and Nutrition*, 59(19), 3082–3101. <https://doi.org/10.1080/10408398.2018.1483890>

Purchase, S., and Volery, T. (2020). Marketing Innovation: A Systematic Review. *Journal of Marketing Management*, 36(9-10), 763–793. <https://doi.org/10.1080/0267257X.2020.1774631>

Rajapathirana, R. P. J., and 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.2017.06.002>

Ramirez, F. J., Parra-Requena, G., Ruiz-Ortega, M. J., and Garcia-Villaverde, P. M. (2018). From External Information to Marketing Innovation: The Mediating Role of Product and Organizational Innovation. *Journal of Business & Industrial Marketing*, 33(5), 693–705. <https://doi.org/10.1108/JBIM-12-2016-0291>

Rhee, J., Park, T., and Lee, D. H. (2010). Drivers of Innovativeness and Performance For Innovative Smes in South Korea: Mediation of Learning Orientation. *Technovation*, 30(1), 65–75. <https://doi.org/10.1016/j.technovation.2009.04.008>

Rosenbusch, N., Brinckmann, J., and Bausch, A. (2011). Is Innovation Always Beneficial? A Meta-Analysis of the Relationship Between Innovation and Performance in SMEs. *Journal of Business Venturing*, 26(4), 441–457. <https://doi.org/10.1016/j.jbusvent.2009.12.002>

Saeidi, S. P., and Othman, M. S. H. (2017). The Mediating Role of Process and Product Innovation in the Relationship Between Environmental Management Accounting and Firm's Financial Performance. *International Journal of Business Innovation and Research*, 14(4), 421–438. <https://doi.org/10.1504/IJBIR.2017.087839>

Sarkar, S., and Costa, A. I. A. (2008). Dynamics of Open Innovation in the Food Industry. *Trends in Food Science & Technology*, 19(11), 574–580. <https://doi.org/10.1016/j.tifs.2008.09.006>

Sekaran, U., and Bougie, R. (2011). *Business Research Methods: A skill-building approach* (7th ed.). Wiley.

Shanker, R., Bhanugopan, R., Van der Heijden, B. I., and Farrell, M. (2017). Organizational Climate for Innovation and Organizational Performance: The Mediating Effect of Innovative Work Behavior. *Journal of Vocational Behavior*, 100, 67-77. <https://doi.org/10.1016/j.jvb.2017.02.004>

Suhag, A., Solangi, S. U. R., Larik, R. S. A., Lakho, M., and Tagar, A. (2017). The Relationship of Innovation with Organizational Performance. *International Journal of Research - GRANTHAALAYAH*, 5, 292–306. <https://doi.org/10.29121/granthaalayah.v5.i2.2017.1741>

Widiartanto., and Suhadak. (2013). The Effect of Transformational Leadership on Market Orientation, Learning Orientation, Organization Innovation and Organization Performance (Study on Star-Rated Hotels in Central Java Province, Indonesia). *IOSR Journal of Business and Management*, 12(6), 08–18. <https://doi.org/10.9790/487X-1260818>

Yeni, L. S. (2024). Sumatera Barat Province in Figures 2024 (p. 1043) [Annual Report]. *BPS Sumatera Barat*.

Yulianto, E., & Supriono. (2023). Effect of Open Innovation on Firm Performance Through Type of Innovation: Evidence from SMES in Malang City, East Java, Indonesia. *Cogent Business & Management*, 10(3), 2262671.

Zhang, S., Wang, Z., Zhao, X., and Zhang, M. (2017). Effects of Institutional Support on Innovation and Performance: Roles of Dysfunctional Competition. *Industrial Management & Data Systems*, 117(1), 50–67. <https://doi.org/10.1108/IMDS-10-2015-0408>