

Uncertain Supply Chain Management

homepage: www.GrowingScience.com/uscm

Business performance concept development apparel industry MSMEs in Bali

I Nyoman Nurcaya^{a*}, I Ketut Rahyuda^a, Gusti Ayu Ketut Giantari^a and Ni Wayan Ekawati^a

^aDoctor of Management Science Study Program, Faculty of Economics and Business, Udayana University, Jakarta, Indonesia

ABSTRACT

Article history:

Received May 28, 2023
Received in revised format July 28, 2023
Accepted September 18 2023
Available online
September 18 2023

Keywords:

Entrepreneurship
Strategy
Technology
SME business performance

The apparel industry is one of the business sectors included in Micro, Small and Medium Enterprises (MSMEs) in Bali Province. These apparel industry MSMEs contribute to employment and economic growth in Bali, so their business sustainability must be maintained. Measuring the business performance of MSMEs in the apparel industry needs to be carried out on an ongoing basis to ensure that these MSMEs can survive in increasingly fierce competition. The objectives of this study are: first, to explain the role of innovation strategy in mediating the effect of entrepreneurial orientation on MSME business performance, and second, to explain the role of technological resources in moderating the effect of entrepreneurial orientation on MSME business performance. The research was conducted on apparel MSMEs in Bali with 220 respondents taken randomly. Data were analyzed using the Structural Equation Modeling-Partial Least Square (SEM-PLS) technique. The analysis results show that entrepreneurial orientation has a significant positive effect on the performance of MSMEs. Entrepreneurial orientation has a significant positive effect on innovation strategy, and then innovation strategy has a significant positive effect on MSME business performance. Technological resources strengthen the influence of entrepreneurial orientation on MSME business performance.

© 2024 by the authors; licensee Growing Science, Canada.

1. Introduction

Entrepreneurship can produce entrepreneurs in the field of Micro, Small and Medium Enterprises (MSMEs). Entrepreneurship is one of the best breakthroughs to solve the problem of educated unemployment. One of the MSME fields that are expected to be able to absorb a lot of labour is the apparel industry. MSMEs in the apparel industry have an essential role in developing Indonesia's economic growth. One of the obstacles to the development of MSMEs in Bali is the need for more entrepreneurship-oriented work programs and limited access to technology and information (Denpasar et al. Cooperative Office, 2020). The decline in the performance of MSMEs in Bali was also triggered by the lack of utilization of local wisdom potential (Rahyuda et al., 2018). The fluctuating growth trend of MSMEs reflects suboptimal performance. Thus, managing MSMEs is one of the opportunities to improve the economy and reduce unemployment through entrepreneurial-oriented work programs. Entrepreneurial orientation (EO) is the ability to think and act creatively and innovatively, which can be used as a basis and resource to seek opportunities for success (Singh et al., 2019). The entrepreneurial spirit must be possessed by business people, including MSMEs, in order to survive in increasingly fierce competition. Creative and innovative programs will help MSMEs create products, both goods and services, that have value by customer expectations. Entrepreneurial orientation will create resilient MSME managers because they have the courage to bear risks and are able to make decisions to turn uncertainty into an opportunity (Rofiaty, 2019; Bai et al., 2020; Dong et al., 2020). Entrepreneurial orientation has a significant impact directly on firm performance, including MSMEs (Bai et al., 2020; Basco et al., 2020; Cenamor et al., 2019; Dong et al., 2020; Tajeddini et al., 2020). However, entrepreneurial orientation only sometimes significantly impacts company performance (Arshad et al., 2014), (Rachmawati et al., 2020). In the hospitality sector, entrepreneurial orientation cannot support company growth (Tajeddini et al., 2020). When combined with affective trust, entrepreneurial orientation cannot significantly strengthen or weaken the relationship between business network reach and firm performance, even though other

* Corresponding author

E-mail address: ichangnur@unud.ac.id (I N. Nurcaya)

ISSN 2291-6830 (Online) - ISSN 2291-6822 (Print)

© 2024 by the authors; licensee Growing Science, Canada.

doi: 10.5267/j.uscm.2023.9.019

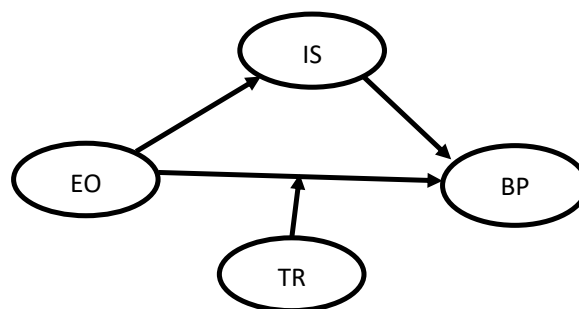
studies require the role of learning orientation (Dong et al., 2020). Entrepreneurial orientation is directly unable to improve firm performance unless combined with other variables such as networking (Tajeddini et al., 2020).

Innovation strategy is the key to competitive advantage in a highly volatile environment. The work of innovation strategies drives a country's economic growth. A high ability to innovate has direct consequences for the ability to compete. The value created by innovation is often embodied in new ways of doing things or new product development programs and processes that contribute to value creation. Research on innovation has long emphasized the importance of enterprises mastering and having effective mechanisms to adjust to environmental changes in order to compete. In different environments, entrepreneurial orientation can have a significant or insignificant effect on innovation performance (Zhang et al., 2020). In addition to innovation strategies, adequate technological resource support will cause internal resources to become a determining factor in organizational performance (Hilman and Kaliappen, 2015). Technological resources in business organizations refer to the use of information technology to achieve certain targets (Mendoza et al., 2021). Technological resources have a very close relationship to entrepreneurship. A successful enterprise requires capabilities in corporate, business and functional planning and strategy, comprehensive financial projections, and resource allocation, as well as information technology (IT) resources and capabilities. IT capabilities include technical skills, knowledge and infrastructure that can be used to assist operational processes. The use of technology significantly affects business performance (Azam, 2015; Okundaye et al., 2019). Technology also strongly supports MSME business performance internationally (Mendy & Rahman, 2019). Based on the description above, apparel MSMEs are worth researching, especially in improving their business performance. The model was developed by adding the innovation strategy variable as an intervening variable that bridges the effect of entrepreneurial orientation on the performance of apparel industry MSMEs. In addition, the technological resource variable is added as a moderating variable that is expected to strengthen the relationship between entrepreneurial orientation and business performance of apparel industry MSMEs.

This research uses the Resource Base View (RBV) as the leading theory. Another theory used is the Contingency Theory as a supporting theory. RBV theory considers that the company's resources and capabilities are essential for the company because they are the core or basis of the company's competitiveness and performance. RBV assumes that a company can compete by managing its resources. The company's resource management becomes a competitive advantage (Bianchi, 2017). Contingency Theory is an organizational theory that states that there is no best way to manage a company. The optimal policy or decision in decision-making depends on the internal and external situations (Ghozali, 2020: 79). These theories are relevant to the variables in the study.

2. Theory Development

The resource-based view (RBV) theory was first introduced by Jay B. Barney in 1991. This theory views that the company's resources and capabilities are important to the company because they are the core or basis of the company's competitiveness and performance. RBV assumes that a company can compete with other companies, by managing its resources with the company's capabilities for competitive advantage (Bianchi, 2017). Knowledge-based view (KBV) is a new extension of the resource-based theory (RBT) that provides a strong theoretical understanding in support of intellectual capital. KBV is derived from RBV and suggests that knowledge in its various forms is an important resource (Taghizadeh, 2020). Contingency theory or often referred to as situational theory or contextual theory was first developed by Lawrence and Lorsch in 1967. Contingency Theory is an organizational theory that states that there is no best way to manage a company. The optimal policy or decision in decision making depends on the internal situation and the external situation (Ghozali, 2020: 79). The research model was developed based on RBV and Contingency Theory studies. The developed research model is presented in Fig. 1.



Information:

EO=Entrepreneurship Orientation; IS=Innovation Strategy; TR=Technology Resource; BP=Business Performance

Fig. 1. Research Model

From the theories and concepts developed, the following hypotheses are proposed:

H₁: *Entrepreneurial orientation has a significant positive effect on business performance.*

In entrepreneurial orientation, innovation ability, ability of risk-taking, and proactive nature are key issues in determining company performance (Ciampi et al., 2021; Dong et al., 2020; Mendoza et al., 2021; Rofiaty, 2019; Thompson, 2009).

Entrepreneurial orientation does not always have a significant positive impact on improving business performance (Arshad et al., 2014; Rachmawati et al., 2020; Tajeddini et al., 2020).

H₂: *Entrepreneurial orientation has a significant positive effect on innovation strategy.*

A higher entrepreneurial orientation will cause the company to also make policies or decisions that support entrepreneurial orientation to achieve company performance (Hilman & Kaliappen, 2015; Sofyan, 2017; Zhang et al., 2020). Previous research examining this relationship showed significant positive results about the impact of entrepreneurial orientation on innovation strategies (Cenamor et al., 2019; Zhang et al., 2020). Entrepreneurial orientation does not have a maximal effect on innovation strategy. Likewise, innovation strategy does not significantly affect business performance (Rofiaty, 2019). Although entrepreneurial orientation significantly affects innovation strategy, its effect is still relatively low (Ciampi et al., 2021).

H₃: *Innovation strategy has a significant positive effect on business performance.*

Innovation strategy significantly impacts the company's business performance (Hilman & Kaliappen, 2015; Hutahayan, 2020; Sofyan, 2017; Zhang et al., 2020), (Hameed et al., 2018). A better innovation strategy will lead to better company performance achievements, such as financial performance and performance in other fields (Fernandez, 2022). However, not all innovation strategies support the achievement of business performance well (Mendoza et al., 2021). Corporate innovation strategies, such as cost strategies, have no significant effect on company performance (Kumar and Garza-Reyes, 2020).

H₄: *Technology resources have a significant positive effect on business performance.*

The development of information technology greatly affects the company's business performance (Azam, 2015; Bianchi, 2017; Mendoza et al., 2021; Mendy & Rahman, 2019; Okundaye et al., 2019). The company invests about 33 per cent of its total investment to increasing its information technology resources (Loudon and Loudon, 2016). Based on research, not all technological resources have a significant impact on the company's business performance (Maroufkhani et al., 2020).

H₅: *Entrepreneurial orientation has a significant positive effect on business through innovation strategy.*

Entrepreneurial orientation and innovation strategy significantly impact business performance (Hilman & Kaliappen, 2015; Sofyan, 2017; Zhang et al., 2020). Entrepreneurial orientation and innovation strategies are generally needed to generate specific ideas, although the mediating role of innovation strategies is not significant (Lita et al., 2020; Callaway & Jagani, 2015). Entrepreneurial orientation can only sometimes improve business performance, even though it is mediated by adequate business strategy (Saleh & Safari, 2020).

H₆: *Technology resources moderate the effect of entrepreneurial orientation on business performance.*

Entrepreneurial orientation significantly improves company performance (Dong et al., 2020; Rofiaty, 2019; Singh et al., 2019). Entrepreneurial orientation supported by adequate technological resources will greatly support improved business performance (Nurmadewi & Mahendrawathi, 2019; Siregar et al., 2017). However, some research shows that information technology cannot moderate the relationship between entrepreneurial orientation and business performance. (Liao et al., 2020). Technology is also not proven to moderate the influence of increasingly dynamic customers on company performance (Park & Ryu, 2015).

3. Research Methods

The research was conducted on apparel MSMEs in Bali with 220 respondents taken randomly. Data were analyzed using the Structural Equation Modeling-Partial Least Square (SEM-PLS) technique. The list of variables in the study is presented in Table 1.

Table 1
List of variables

Variable	Indicator	Sources
Entrepreneurial orientation	Innovative (x1.1) Risk-taking (x1.2) Proactive (x1.3)	(Rofiaty, 2019)
Technology resources	Investment in Information Technology (X2.1) Ability to operate Information Technology (X2.2) Own Technology Infrastructure (X2.3)	(Bianchi, 2017; Wijoyo <i>et al.</i> , 2020):
Innovation strategy	Business process improvement (Y1.1) Developing new value from customers (Y1.2) Developing new methods (Y1.3) Rapid Responsive (Y1.4)	(AlQershi, 2021; Telagawathi <i>et al.</i> , 2022; Ulubeyli <i>et al.</i> , 2018):
Business Performance	Business process improvement (Y1.1) Developing new value from customers (Y1.2) Developing new methods (Y1.3) Rapid Responsive (Y1.4)	(Giantari <i>et al.</i> , 2022; Yasa <i>et al.</i> , 2021):

4. Discussion

The results of data analysis on the determinants and their consequences for the performance of MSMEs in the apparel industry with PLS are presented in Fig. 2.

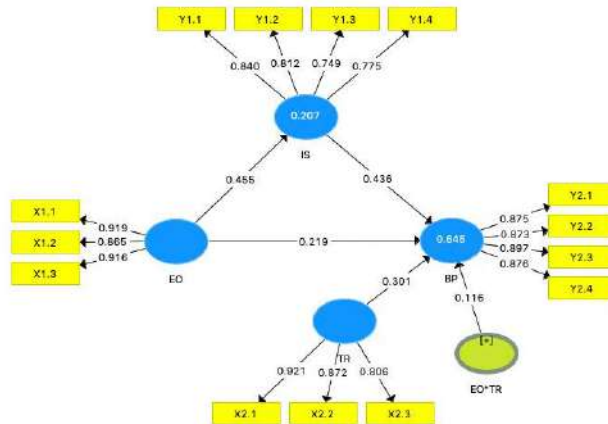


Fig. 2. Estimation Results

Outer model or measurement model assessment

A measurement model is a way of measuring the validity of the model. PLS has two criteria for assessing the outer model: composite reliability and discriminant validity.

Composite reliability criteria are measured based on internal consistency reliability and convergent validity. A commonly used criterion for testing internal consistency reliability is Cronbach's Alpha. The Cronbach's Alpha value and Composite Reliability above 0.7 indicate that the construct has a good level of reliability (Hair Jr. et al., 2017, p. 136).

Based on the analysis, the results of the composite reliability measurement are presented in Table 2.

Table 2
Cronbach's Alpha Test Value and Composite Reliability

Construct	Alpha Cronbach's	Composite Reliability
BP	0.903	0.932
EO	0.883	0.928
EO×TR	1.000	1.000
IS	0.809	0.872

Source: Data analysis

The Cronbach's alpha and composite reliability values presented in Table 2 have values above 0.7, indicating that the constructs have high reliability. Convergent validity is the extent to which an indicator is positively correlated with other indicators within the same construct. To evaluate the convergent validity of reflective constructs, researchers consider the factor loadings of the indicators and the Average Variance Extracted (AVE). The AVE values are presented in Table 3.

Table 3
Nilai AVE

Variable	Average Variance Extracted (AVE)
BP	0.775
EO	0.811
EO×TR	1.000
IS	0.631
TR	0.753

Source: Analysis result

The minimum requirement in the convergent validity test is that the factor load of all indicators must be statistically significant and worth 0.70 or higher. An AVE value of 0.50 or higher indicates that, on average, more than half of the variance of its indicators can be explained by existing constructs. (Hair Jr et al., 2017: 137). Table 3 shows that all variables have AVE values above 0.5. The factor loading of each indicator is more than 0.7. Discriminant validity testing uses the Fornell-Larcker value. The Fornell-Lacker test is performed by comparing the square root value of AVE with the correlation value between latent variables. The value located on the diagonal line indicates the square root value of the AVE, and the other value is the

correlation between latent variables. Discriminant validity is met if the square root value of the AVE is higher than the correlation value between latent variables. The results of testing discriminant validity with Fornell-Lacker are presented in Table 4.

Table 4
Results of Discriminant Validity Testing with Fornell-Larcker

	BP	EO	EO*TR	IS	TR
BP	0.880				
EO	0.538	0.900			
EO×TR	0.077	-0.015	1.000		
IS	0.729	0.455	-0.038	0.795	
TR	0.668	0.406	-0.071	0.657	0.867

Source: Data processed

Table 4 shows that the correlation between latent variables has a value smaller than the square root of AVE. Thus, discriminant validity has been met.

Testing the structural model (inner model)

Testing the structural (Inner) model describes the relationship between latent variables based on substantive theory. Inner model testing through R-Square (R^2). The R^2 value shows the strengths and weakness of the research model, which shows the strength and weakness of the influence exogenous variables have on endogenous variables. The results of structural model testing with R^2 values are presented in Table 5.

Table 5

Variable	R Square	R Square Adjusted
BP	0.645	0.639
IS	0.207	0.203

Distribution of R-Square Values

Source: Data processed

Table 5 shows that the Innovation Strategy variable has an R^2 value of 0.207, which means that 20.7 percent of changes in innovation strategies are caused by changes in the value of entrepreneurial orientation. Other variables outside the model have an impact of 79.3 per cent on innovation strategies. The business performance variable has an R^2 value of 0.645, which means that 64.50 per cent of changes in MSME business performance are caused by entrepreneurial orientation variables, innovation strategies, and technological resources. As much as 35.50 per cent of changes in MSME performance are caused by variables outside the model—inner Model Testing through Q-Square Predictive Relevance (Q^2). The Q-Square Predictive Relevance (Q^2) value is used to evaluate how well the model generates the observations. A Q^2 value greater than 0 indicates the model has predictive relevance for a particular endogenous construct. Conversely, values of 0 and below indicates a lack of predictive relevance (Hair Jr. et al., 2017). The analysis results show the Q^2 value shows a value of 0.7185. This shows that 71.85 per cent of the relationship between variables can be explained by the model, while the remaining 28.15 per cent is explained by other factors not included in the research model. With these results, the model has shown very good observations. The significance of the path coefficient value indicates the strong influence of changes in exogenous constructs on changes in endogenous constructs. Partial Least Square (PLS) applications use bootstrapping procedures in hypothesis testing. Hypothesis testing in this study is based on a significance level of 0.05, with a two-sided test so that the t-table value is 1.96 (Hair Jr et al., 2017, p. 206). The results of testing the significance of the direct effect on the model are presented in Table 6.

Table 6
Coefficient and Significance of Direct Effect

Path Relationship	(O)	(M)	(STDEV)	T Statistics	P Values	Information
EO → BP	0.219	0.221	0.057	3.818	0.000	Accepted
EO → IS	0.455	0.461	0.053	8.504	0.000	Accepted
EO×TR → BP	0.116	0.113	0.047	2.452	0.015	Accepted
IS → BP	0.436	0.435	0.067	6.505	0.000	Accepted
TR → BP	0.301	0.301	0.068	4.403	0.000	Accepted

Source: Data processed

Table 6 shows the direct effect coefficients and their respective significance levels. All direct relationships have a significant positive impact. The indirect effect is the path of influence of the exogenous latent variable on the endogenous latent variable through the mediating variable. In this study, the mediation relationship is limited to the effect of the exogenous latent variable of entrepreneurial orientation (EO) on MSME business performance through the latent variable of innovation strategy. The detailed indirect effect coefficient value is presented in Table 7.

Table 7
Coefficient and Significance of Indirect Effect

Relationship Latent Variable	(O)	(M)	(STDEV)	T Statistics	P Values	Info.
EO → IS → BP	0.198	0.200	0.037	5.300	0.000	Accepted

Source: Data processed

Table 7 shows that the indirect effect coefficient of the effect of the entrepreneurial orientation variable (EO) on MSME business performance (BP) through the innovation strategy variable (IS) is 0.198 with a significance level of 0.000. These results indicate that the innovation strategy variable is significantly proven to mediate the effect of entrepreneurial orientation on MSME business performance. Entrepreneurial orientation has a significant positive effect on MSME business performance. This indicates that entrepreneurial orientation has a strong relationship to improving the performance of MSMEs. These results align with previous studies examining the relationship of entrepreneurial orientation in improving MSME performance (Indrawati, 2020; Rofiaty, 2019; Telagawathi et al., 2022). The results of the analysis also show that there is a significant positive effect of entrepreneurial orientation on innovation strategy. This shows that entrepreneurial orientation is important in fostering the innovation strategy of MSME owners and managers. The results of this study are supported by previous studies examining the impact of entrepreneurial orientation on innovation strategy (Hutahayan, 2020; Zhang et al., 2020). Innovation strategy is a policy of building a company's ability to utilize limited resources to work in an increasingly complex and challenging environment (Taghizadeh, 2020). The research results are supported by previous studies, which also show significant results (Hamzah & Othman, 2020; Kumar et al., 2017; Wahyuni, 2020).

The specific influence of entrepreneurial orientation on MSME performance in this study is to instil confidence or self-confidence in MSME owners or managers. Entrepreneurial orientation must be able to build confidence in their competencies so that MSMEs have good business performance. This means that confidence in one's own competence will facilitate MSME business performance and economic growth. Technology resources has a significant positive impact on MSME business performance. This result is in line with several research results that show Technology resources strongly impact improving MSME performance. (Hilman and Kaliappen, 2015; Hutahayan, 2020; Wahyuni, 2020). The better the technological resources owned by MSME owners and managers, the higher the performance of MSMEs. (Arshad et al., 2014; Mendoza et al., 2021; Mendy and Rahman, 2019; Okundaye et al., 2019). Technological resources in business organizations refer to the use of information technology to achieve certain targets (Mendoza et al., 2021). The results of testing the hypothesis of the indirect effect of the entrepreneurial orientation construct on MSME business performance through innovation strategy are unidirectional and significant. The mediating role of the innovation strategy variable is partial. This means that part of the effect of entrepreneurial orientation on MSME performance is intervened by innovation strategy (Park & Ryu, 2015; Telagawathi et al., 2022). The model was developed by including innovation strategy variables as mediators. The aim is to find out how the direct effect and indirect effect of entrepreneurial orientation on improving MSME business performance. Entrepreneurial orientation directly improves the business performance of MSMEs. This means that MSME owners and managers must improve their innovation, risk-taking and proactive capabilities. In addition to the direct effect, entrepreneurship also has an indirect effect on MSME business performance through innovation strategies. This indicates that to improve the business performance of MSMEs, owners and managers must increase entrepreneurial orientation so that it has an impact on innovation strategies. In the next stage, the innovation strategy will have an impact on improving MSME business performance. The analysis and hypothesis testing results show that the technological resources construct significantly moderates the relationship between entrepreneurial orientation and MSME performance. Technological resources play a quasi-moderator, which, in addition to significantly moderating the relationship between entrepreneurial orientation and MSME performance, is also an exogenous construct that significantly affects MSME performance. MSME owners and managers need to pay attention to technological changes to improve their business performance. Information technology brings many benefits to company operations. Almost all fields of work require the help of information technology. In apparel production activities, clothing design can utilise computer-based applications. Knowing the condition of competitors can also be done by utilising internet technology. Thus, innovation and opportunity utilisation are easier to detect. The reach of internet information is international. Overall, the results of this study support the RBV theory and Contingency Theory. RBV states that optimal resource management will increase competitive advantage. Contingency Theory is an organizational theory that states that there is no best way to manage a company. The optimal policy or decision in decision-making depends on the internal and external situations (Ghozali, 2020: 70).

4. Conclusion

The study on business performance concept development within the apparel industry Micro, Small, and Medium Enterprises (MSMEs) in Bali sheds light on crucial factors influencing the sustainability and success of these businesses. By examining the role of entrepreneurial orientation, innovation strategy, and technological resources, the research offers valuable insights into enhancing business performance in this sector. The findings suggest that entrepreneurial orientation plays a vital and positive role in influencing the performance of MSMEs in the apparel industry. Entrepreneurial orientation also significantly affects innovation strategy, which, in turn, positively impacts MSME business performance. Additionally, technological resources were found to enhance the influence of entrepreneurial orientation on MSME business performance. Overall, the results emphasize the importance of entrepreneurial orientation, innovation strategy, and technological resources in determining the sustainability and success of MSMEs in the apparel industry in Bali.

References

- AlQershi, N. (2021). Strategic thinking, strategic planning, strategic innovation and the performance of SMEs: The mediating role of human capital. *Management Science Letters*, 11, 1003–1012. <https://doi.org/10.5267/j.msl.2020.9.042>
- Arshad, A. S., Rasli, A., Arshad, A. A., & Zain, Z. M. (2014). The Impact of Entrepreneurial Orientation on Business Performance: A Study of Technology-based SMEs in Malaysia. *Procedia - Social and Behavioral Sciences*, 130(1996),

- 46–53. <https://doi.org/10.1016/j.sbspro.2014.04.006>
- Azam, M. S. (2015). *E-Services Adoption: Processes by Firms in Developing Nations*. Emerald Group Publishing Limited.
- Bai, W., Liu, R., & Zhou, L. (2020). Enhancing the learning advantages of newness: The role of internal social capital in the international performance of young entrepreneurial firms. *Journal of International Management*, 26(2), 100733. <https://doi.org/10.1016/j.intman.2020.100733>
- Basco, R., Hernández-Perlines, F., & Rodríguez-García, M. (2020). The effect of entrepreneurial orientation on firm performance: A multigroup analysis comparing China, Mexico, and Spain. *Journal of Business Research*, 113(September), 409–421. <https://doi.org/10.1016/j.jbusres.2019.09.020>
- Bianchi, C. (2017). SME International Performance in Latin America The Role of Entrepreneurial and Technological Capabilities. *Journal of Small Business and Enterprise Development*, 24(1), 176–195. <https://doi.org/10.1108/JSBED-09-2016-0142>
- Callaway, S. K., & Jagani, S. B. (2015). The impact of banks' entrepreneurial orientation on strategic control systems. *American Journal of Business*, 30(1), 49–71.
- Cenamor, J., Parida, V., & Wincent, J. (2019). How entrepreneurial SMEs compete through digital platforms: The roles of digital platform capability, network capability and ambidexterity. *Journal of Business Research*, 100(March), 196–206. <https://doi.org/10.1016/j.jbusres.2019.03.035>
- Ciampi, F., Demi, S., Magrini, A., Marzi, G., & Papa, A. (2021). Exploring the impact of big data analytics capabilities on business model innovation: The mediating role of entrepreneurial orientation. *Journal of Business Research*, 123(June 2020), 1–13. <https://doi.org/10.1016/j.jbusres.2020.09.023>
- Dinas Koperasi Usaha Kecil dan Menengah Kota Denpasar. (2020). *Laporan Kinerja Instansi Pemerintah (LKJIP) 2020*.
- Dong, B., Xu, H., Luo, J., Nicol, C. D., & Liu, W. (2020). Many roads lead to Rome: How entrepreneurial orientation and trust boost the positive network range and entrepreneurial performance relationship. *Industrial Marketing Management*, 88(February), 173–185. <https://doi.org/10.1016/j.indmarman.2020.04.016>
- Fernandez, V. (2022). Technological Forecasting & Social Change Environmental management : Implications for business performance , innovation , and financing. *Technological Forecasting & Social Change*, June, 121797. <https://doi.org/10.1016/j.techfore.2022.121797>
- Ghozali, I. (2020). *25 Grand Theory, Teori Besar Ilmu Manajemen, Akuntansi dan Bisnis*. Yoga Pratama Semarang.
- Giantari, I. G. A. K., Yasa, N. N. K., Suprasto, H. B., & Rahmayanti, P. L. D. (2022). The role of digital marketing in mediating the effect of the COVID-19 pandemic and the intensity of competition on business performance. *International Journal of Data and Network Science*, 6(1), 217–232. <https://doi.org/10.5267/J.IJDNS.2021.9.006>
- Hair Jr, J. F., M.Hult, G. T., M. Ringle, C., & Sartstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM)* (Second). Sage.
- Hameed, W. U., Basheer, M. F., Iqbal, J., Anwar, A., & Ahmad, H. K. (2018). Determinants of Firm's open innovation performance and the role of R & D department: an empirical evidence from Malaysian SME's. *Journal of Global Entrepreneurship Research*, 8(1). <https://doi.org/10.1186/s40497-018-0112-8>
- Hamzah, M. I., & Othman, A. K. (2020). Mediating effects of individual market orientation on the link between learning orientation and job performance. 4(June 2019), 655–668. <https://doi.org/10.1108/JSBED-08-2018-0239>
- Hilman, H., & Kaliappen, N. (2015). Innovation strategies and performance : are they truly linked? *World Journal of Entrepreneurship, Management and Sustainable Development*, 11(1), 48–63. <https://doi.org/10.1108/WJEMSD-04-2014-0010>
- Hutahayan, B. (2020). The mediating role of human capital and management accounting information system in the relationship between innovation strategy and internal process performance and the impact on corporate financial performance. 27(4), 1289–1318. <https://doi.org/10.1108/BIJ-02-2018-0034>
- Indrawati, H. (2020). Barriers to technological innovations of SMEs : how to solve them ? <https://doi.org/10.1108/IJIS-04-2020-0049>
- Kumar, D., Samalia, H. V., & Verma, P. (2017). Exploring the suitability of cloud computing for small and medium-sized enterprises in India. *Journal of Small Business and Enterprise Development*, 24(4), 814–832. <https://doi.org/10.1108/JSBED-01-2017-0002>
- Kumar, V., Reyes, G., & Jose, A. (2020). Learning orientation and innovation performance : the mediating role of operations strategy and supply chain integration. 4(December 2019), 457–474. <https://doi.org/10.1108/SCM-05-2019-0209>
- Liao, S., Fu, L., & Liu, Z. (2020). Investigating open innovation strategies and firm performance: the moderating role of technological capability and market information management capability. *Journal of Business and Industrial Marketing*, 35(1), 23–39. <https://doi.org/10.1108/JSBED-01-2018-0051>
- Loudon, K. C., & Loudon, J. P. (2016). *Management Information Systems, Managing Digital Firm* (Fourteenth). Pearson Education.
- Maroufkhani, P., Wan Ismail, W. K., & Ghobakhloo, M. (2020). Big data analytics adoption model for small and medium enterprises. *Journal of Science and Technology Policy Management*, 11(2), 171–201. <https://doi.org/10.1108/JSTPM-02-2020-0018>
- Mendoza, G., Llopis, J., Gasco, J., & Gonzalez, R. (2021). Entrepreneurship is seen by entrepreneurs in a developing country. *Journal of Business Research*, 123(June 2020), 547–556. <https://doi.org/10.1016/j.jbusres.2020.10.038>
- Mendy, J., & Rahman, M. (2019). Supporting SMEs' internationalization through a deeper understanding of human and technology barriers: Applying effective HRM processes from a developing country. *Journal of Organizational*

- Effectiveness*, 6(4), 205–226. <https://doi.org/10.1108/JOEPP-12-2018-0121>
- Nurmadewi, D., & Mahendrawathi, E. R. (2019). Analyzing linkage between business process management (BPM) capability and information technology: A case study in garment SMEs. *Procedia Computer Science*, 161, 935–942. <https://doi.org/10.1016/j.procs.2019.11.202>
- Okundaye, K., Fan, S. K., Dwyer, R. J., Fan, S. K., & Dwyer, R. J. (2019). *Impact of information and communication technology in Nigerian small- to medium-sized enterprises*. <https://doi.org/10.1108/JEFAS-08-2018-0086>
- Park, T., & Ryu, D. (2015). Drivers of technology commercialization and performance in SMEs The moderating effect of environmental dynamism. *Management Decision*, 53(2), 338–353.
- Prima Lita, R., Fitriana Faisal, R., & Meuthia, M. (2020). Enhancing small and medium enterprises performance through innovation in Indonesia: A framework for creative industries supporting tourism. *Journal of Hospitality and Tourism Technology*, 11(1), 155–176. <https://doi.org/10.1108/JHTT-11-2017-0124>
- Rachmawati, E., Suliyanto, & Suroso, A. (2020). Direct and indirect effect of entrepreneurial orientation, family involvement and gender on family business performance. *Journal of Family Business Management*. <https://doi.org/10.1108/JFBM-07-2020-0064>
- Rahyuda, K., Rahyuda, A. G., Rahyuda, H., & Candradewi, M. R. (2018). The relationship between the concept of competitive advantage and the value of Catur Paramitha on SMEs in Sarbagita. *International Journal of Law and Management*, 60(6), 1522–1528. <https://doi.org/10.1108/IJLMA-09-2017-0210>
- Rofiaty, R. (2019). The relational model of entrepreneurship and knowledge management toward innovation, strategy implementation and improving Islamic boarding school performance. *Journal of Modelling in Management*, 14(3), 662–685. <https://doi.org/10.1108/JM2-05-2018-0068>
- Saleh, A. S., & Safari, A. (2020). Key determinants of SMEs' export performance: a resource-based view and contingency theory approach using potential mediators. *Journal of Business & Industrial Marketing*, 35(4), 635–654. <https://doi.org/10.1108/JBIM-11-2018-0324>
- Singh, S. H., Bhowmick, B., Eesley, D., & Sindhav, B. (2019). Grassroots innovation and entrepreneurial success: Is entrepreneurial orientation a missing link? *Technological Forecasting and Social Change*, November 2017, 119582. <https://doi.org/10.1016/j.techfore.2019.02.002>
- Siregar, J. J., Puspokusumo, R. A. W., & Rahayu, A. (2017). Analysis of Affecting Factors Technology Acceptance Model in the Application of Knowledge Management for Small Medium Enterprises in Industry Creative. *Procedia Computer Science*, 116, 500–508. <https://doi.org/10.1016/j.procs.2017.10.075>
- Sofyan. (2017). Orientasi Kewirausahaan, Kinerja Inovasi dan Kinerja Pemasaran Usaha Mikro, Kecil dan Menengah pada Sentra Industri Tas Desa Kadugene. *Jurnal Riset Bisnis Dan Manajemen Tirtayasa (JRBMT)*, 1(1), 68.
- Taghizadeh, S. K. (2020). *Knowledge management capability , environmental dynamism and innovation strategy in Malaysian firms*. <https://doi.org/10.1108/MD-01-2020-0051>
- Tajeddini, K., Martin, E., & Ali, A. (2020). Enhancing hospitality business performance: The role of entrepreneurial orientation and networking ties in a dynamic environment. *International Journal of Hospitality Management*, 90(February), 102605. <https://doi.org/10.1016/j.ijhm.2020.102605>
- Telagawathi, N. L. W. S., Yasa, N. N. K., Giantari, I. G. K. A., & Ekawati, N. W. (2022). The role of innovation strategies in mediating COVID-19 perceptions and entrepreneurship orientation on Endek weaving craft business performance. *Uncertain Supply Chain Management*, 10(3), 913–922. <https://doi.org/10.5267/j.uscm.2022.3.003>
- Thompson, E. J. A. C. J. (2009). Consumer Culture Theory Introduction: Consumer Culture Theory: Ten Years Gone (and Beyond). *The International Journal of Logistics Management*, 20(1), 97–123.
- Ulubeyli, S., Kazaz, A., & Sahin, S. (2018). Survival of construction SMEs in macroeconomic crises: Innovation-based competitive strategies. *Journal of Engineering, Design and Technology*. <https://doi.org/10.1108/JEDT-03-2018-0057>
- Wahyuni, N. M. (2020). *The effect of entrepreneurial orientation variables on business performance in the SME industry context*. 32(1), 35–62. <https://doi.org/10.1108/JWL-03-2019-0033>
- Wijoyo, H., Indrawan, I., & Firmansyah. (2020). *Kewirausahaan Berbasis Teknologi (Teknopreneurship)* (Nandan Limakrisna (ed.); Issue June). PT. Pene Persada.
- Yasa, N. N. K., Giantari, I. G. A. K., Sukaatmadja, I. P. G., Sukawati, T. G. R., Ekawati, N. W., Nurcaya, I. N., Rahanatha, G. B., & Astari, A. A. E. (2021). The role of relational and informational capabilities in mediating the effect of social media adoption on business performance in the fashion industry. *International Journal of Data and Network Science*, 5(4), 569–578. <https://doi.org/10.5267/j.ijdns.2021.8.011>
- Zhang, J. A., O'Kane, C., & Chen, G. (2020). Business ties, political ties, and innovation performance in Chinese industrial firms: The role of entrepreneurial orientation and environmental dynamism. *Journal of Business Research*, 121(August), 254–267. <https://doi.org/10.1016/j.jbusres.2020.08.055>

