

Entrepreneurial Orientation and Business Sustainability of Indonesian Start-ups: Does Innovation Performance Matter as a Mediating Factor?

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Abstract

While youth and future generations will carry the burden of the crisis's long-term economic and social implications, short-term economic and equity considerations may outweigh their business sustainability. The purpose of this study is to find out and analyze the entrepreneurial orientation impact on business sustainability during COVID-19 pandemic. A sample of 101 young respondents was selected from small and medium online businesses in Jakarta. A random sampling technique was executed. For this study, a cross-sectional and quantitative research design was used based on the survey process. The two-part questionnaire was used for data collection. Structural Equation Model (SEM) was used to assess the hypothesis of this study. The result shows that entrepreneurial orientation has a positive and significant impact directly on business sustainability. The same situation also occurred as an indirect effect of entrepreneurial orientation on business sustainability through innovation performance. This study suggests that online small and medium entrepreneurs need to implement entrepreneurial orientation strategy to grow their online customer acquisition business process. Young e-business owners are advised that understanding the importance of constantly producing, evaluating, and successfully implementing new ideas have a higher chance of surviving and prospering in today's competitive global market.

Keywords

Entrepreneurial Orientation, Innovation Performance, Business Sustainability, Mediating Factor and Indonesian Start-ups.

1. Introduction

The COVID-19 pandemic forces most of the governments all over the world to respond by refocusing their development programs on economic recovery and reorienting policies related to sustainability issues. The impact also reverberates through the Indonesian regional economies as the decline in sales of its small and medium enterprises presents a sizable effect on the business sustainability (Anggraeni 2020).

The organizational phenomenon of entrepreneurial orientation has become one of the crucial considerations in fulfilling its promise as a driver of firm performance outcomes (Guo and Wang 2022). Defined as a business process of a company that generates entrepreneurial decisions to create competitive advantage, entrepreneurial orientation was thought of that organizations could be like individuals (Covin and Wales 2019, Wales et al. 2021). Many literatures have elaborated the influential dimensions of entrepreneurial orientation. For instance, Sharif and Arif (2021) suggested that entrepreneurial orientation comprises reactiveness, innovativeness, aggressive competition, risk-taking, autonomy, and motivation. Entrepreneurial orientation consists of three dimensions (innovativeness; proactiveness; risk-taking) (Rezaei and Ort 2018). However, the results indicated inconsistent findings regarding the effect on firm performance. Scholars have highlighted many factors that generate entrepreneurial orientation. However, the role of innovation performance has been understudied in previous studies (Parida et al. 2017).

Similarly, we know very little about the factors of entrepreneurial orientation and business sustainability, and few studies examined the positive relationship between the two (Sung and Park 2018, Diabate et al. 2019). Thus, it is not clearly understood whether the process through which entrepreneurial orientation may influence business sustainability (Sung and Park 2018). We suggest that innovation performance may be an important mediating factor that explains how entrepreneurial orientation can be more encouraged to demonstrate business sustainability.

Despite these important findings, further study into a mediating influence of entrepreneurial orientation on business sustainability is warranted. Some studies have verified that entrepreneurial orientation had a positive effect on innovation performance (Shaher and Ali 2020). Furthermore, innovation performance represents a necessary first step toward business sustainability (Geissdoerfer et al. 2018). However, a systematic review by Freixanet et al. (2020) indicated non-significant effect about the relationship between entrepreneurial orientation and innovation performance. The results of previous studies are thus inconsistent and needs to be further explored. This motivates us to propose that innovation process serves as a mediator in the entrepreneurial orientation-business sustainability relationship.

Therefore, this study aims to examine the effect of entrepreneurship orientation on the business sustainability and investigate the mediating effects of innovation performance. In the next section, we briefly define entrepreneurship orientation, innovation performance, business sustainability, and highlight some of their specific characteristics.

2. Literature Review

2.1 Entrepreneurial Orientation

A highly entrepreneurial-oriented organization is the most adept at creating new organizational forms and industrial configurations, by means of which they can shape market arrangements to their advantage (Baker and Sinkula 2009). This entrepreneurial orientation can be used for companies to create business strategies and innovate to have a competitive advantage.

Entrepreneurial orientation is considered as an important thing to gain an advantage in competing with competitors which of course can increase profits for a company itself. Lomberg et al. (2017) also explains entrepreneurial orientation as a strategy-making process for a company by providing the basis for entrepreneurial decisions and actions that aim to create a competitive advantage with competitors. While Anderson et al. (2014) define entrepreneurial orientation as a combination of studying innovative and proactive entrepreneurial behavior with managerial willingness to seize strategic opportunities even with uncertain results.

Entrepreneurial orientation is a process where the company will create a business process that can generate a competitive advantage. Entrepreneurial orientation based on Lumpkin and Dess (1996) theory is divided into: innovativeness, risk-taking, proactiveness, competitive aggressiveness and autonomy, and these five indicators are combined to calculate entrepreneurial orientation (Sok et al. 2017).

2.2 Innovation Performance

Rauter et al. (2019) posited that sustainable innovation performance is the result of company innovation that prioritizes product design that can last such as using environmentally friendly materials, efficient production processes, paying attention to environmental conditions such as proper waste disposal, and social responsibility such as paying attention to work safety, and work ethics. This is in line with the thoughts of Albort-Morant et al. (2018) which defines green

innovation performance as an innovation that has the main goal of minimizing or avoiding damage to the surrounding environment by processing waste, using environmentally friendly raw materials, can be carried out properly, namely meeting market demand, creating good corporate value, and increasing yields. Benitez et al. (2018) define innovation performance in the form of a change process from an existing product or business process and/or the development of a new product or business process both obtained from the company's internal and external knowledge.

2.3 Business Sustainability

During the COVID-19 pandemic, many business sectors were hit and even had to go out of business, due to declining demand and because there were calls to stay at home. Pradipto et al. (2019) posited that knowledge management is a strategic resource to drive sustainable competitive advantage, especially in turbulent times. Dyllick and Muff (2017) define business sustainability as a process by which a company can manage risks, liabilities and profitability, and social and environmental opportunities. Gross-Golacka et al. (2020) describe business sustainability as a business strategy that is integrated with social, economic, and environmental factors into the business model. This is in line with the thinking of Svensson et al. (2016) regarding business sustainability is a company's effort not to be fixated on profitability, but also the impact on the surrounding environment, social, as well as the wider economy and society.

2.4 Hypotheses Development

Figure 1 shows the structural model. After achieving a company's success in opening a new business and of course being able to compete with the existing market, the businessman will carry out various business strategies to survive. The strategy is designed to make the company have a competitive advantage that will affect business sustainability in the long term. With good resource management and being able to feel customer desires, a company can move forward, develop and be sustainable. Researchers assess entrepreneurial orientation is something that companies need to be able to achieve business sustainability and the two variables have a relationship. In previous studies, it was found that entrepreneurial orientation has a positive influence on business sustainability (Mohamad and Chin 2019, Ueasangkomsate 2019, Susanti and Wibisono 2018). Therefore, our first hypothesis is as follows:

Hypothesis 1 (H1): There is a positive and significant effect of Entrepreneurial Orientation towards Business Sustainability.

For a company to create an innovation, it cannot be arbitrary, for it takes a lot of consideration so that the innovations carried out can have a positive impact on the business they run. One of these considerations is taken from the perspective of entrepreneurial orientation as a reference for companies to make business strategies and innovate to have a competitive advantage compared to competitors. Therefore, we can consider that entrepreneurial orientation has a relationship with innovation performance as in previous research, the study found that the entrepreneurial orientation variable has a positive influence on innovation performance (Zhai et al. 2018). A previous study states that there is a positive influence between entrepreneurial orientation and innovation performance (Kollmann et al. 2021). Thus, we can hypothesize:

Hypothesis 2 (H2): There is a positive and significant effect of Entrepreneurial Orientation towards Business Sustainability.

Innovation is the main key that companies need to be able to move forward and of course attract customers to be loyal to the company. The company will continue to create a product innovation even in the form of promotion, the company also makes new changes and follows the current era to be able to generate competitive advantage. Businesses must look for something new and unique for customers, and companies also need to know the resources they currently have. Resources have an important role in the company to be able to continue to innovate and with good dynamic capability within the company it can encourage the achievement of business sustainability. The innovation performance variable in the company is very much needed in achieving business sustainability. In a previous study, it was found that there is an influence between innovation on business sustainability, which significantly affects financial performance, social performance, and environmental performance (Li et al., 2020). Subsequent research shows that management innovation and technological innovation significantly and positively contribute to sustainability (Zhang et al. 2019). Based on the discussion, our third hypothesis is (Figure 1)

Hypothesis 3 (H3): There is a positive and significant effect of Innovation Performance towards Business Sustainability.

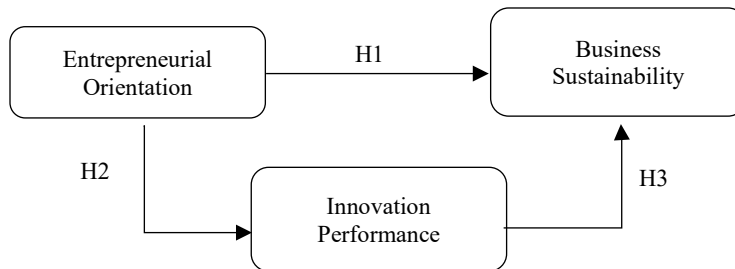


Figure 1. Structural model

3. Methods

In this study, the analysis was using a quantitative research method and conducted with online questionnaires. The questionnaires were only collected once in a certain period, also known as cross-sectional research. These questionnaires used a six-point Likert scale with a close-ended question, which the respondent can only choose to answer based on the choices that have been provided by the researcher. The unit analysis of this study is the online small and medium enterprises (those having a turnover of IDR 300,000,000 to 50,000,000,000 per year) in Jakarta owned and run by the youths (16- to 30-year-olds). (Table 1)

Table 1. Profile of the respondents

Demographic Characteristics	Sub Characteristics	n	%
Number of Employees	0-3	88	87%
	4-6	7	7%
	7-9	4	4%
	10 or more	2	2%
Period of Establishments	<1 year	63	62%
	1-3 years	28	28%
	4-6 years	6	6%
	7-9 years	2	2%
	10 years or more	2	2%
Business Products	Food & Beverage	41	40%
	Clothing & Accessories	25	25%
	Beauty & Cosmetics	6	6%
	Electronics	4	4%
	Health Care	2	2%
	Automotive	2	2%
	Others	20	20%
Online Platform	Messenger (WhatsApp, Line, Telegram)	59	30%
	Social Media (Instagram, Facebook, Twitter, Tik Tok, YouTube)	88	44%
	E-Market Place (Tokopedia, Shopee, Lazada)	53	26%

The study used purposive sampling, which is a sampling technique with consideration of certain limits determined by the researchers judging according to the characteristics of the population. The minimum sample was 97,5% significance level, and minimum R² of 0.50. Therefore, the samples are sufficient for this study.

From the profile of the respondents (see Table 1), most of them (87%) have 0-3 employees, 7% of respondents have 4-6, 4% with 7-9, and 2% with 2 employees. This data shows that SMEs in Jakarta most likely do not need many employees to run their businesses. Most of the respondents (62%) had their businesses established for less than one year. This data shows that the SMEs in Jakarta most likely open their businesses in less than one year. The pandemic COVID-19 could cause the new business opening. Table 1 also shows that 40% of the respondents are food and beverage business owners, followed by 25% clothing and accessories, beauty product business owners at 6%, 4% respondents in electronics, 2% in health care, the other 2% in automotive business. In addition, there are other types of businesses, each with only 1 respondent, such as agribusiness, photography, tour & travel, home supplies, selling

exotic pets, religious, poultry shop, household furniture, services, building materials, recording studios, communication rental services & clothing printing services, homecare, tote bags, homeware, cellular phone accessories, advertising agency, games/toys, sneakers, florists, and sports. As seen in Table 1, most respondents (88) prefer to promote their products on social media, followed by 59 using messenger platforms, and 53 on e-market places. The category of business scale is based on Indonesian Micro, Small, and Medium Enterprise Regulation No.20 (2008), where micro-business revenue is less than 300 million IDR and small business revenue is set on >300 million-2.5 billion IDR.

4. Results and Discussion

4.1 Measurement Model

This study analyses data using partial least squares structural equation modeling, also known as the PLS-SEM method, which is a two-step procedure that entails both evaluation measurements and structural models. First is to test the composite reliability (CR), a score that will measure the construct's latent variables. To be regarded appropriate, the CR must be 0.7 or higher (Hair et al. 2017a). The average variance extracted (AVE) scores of all constructs likewise met the 0.5 threshold, implying high convergent validity (Hair et al. 2017b). (Table 2)

Table 2. Validity and reliability

Variable	Items	Loadings	Alpha	CR	AVE
EO	EO1	0.814	0.879	0.907	0.582
	EO2	0.848			
	EO3	0.732			
	EO4	0.715			
	EO5	0.755			
	EO6	0.740			
	EO10	0.726			
IP	IP1	0.756	0.899	0.921	0.596
	IP3	0.783			
	IP4	0.804			
	IP6	0.729			
	IP7	0.765			
	IP8	0.764			
	IP9	0.737			
	IP10	0.798			
BS	BS3	0.745	0.825	0.884	0.597
	BS4	0.795			
	BS5	0.784			
	BS6	0.757			
	BS7	0.798			
	BS8	0.756			

From 20 items tested using Smart-PLS, nine items are eliminated due to do not achieve the testing standard. In addition, the other remaining items in Table 2 have more than 0.7 outer loadings, are proven to be valid. Items considered reliable should have Cronbach's Alpha >0.7, CR >0.7, and AVE >0.5.

Table 3. Discriminant validity (Fornell-Larcker criterion)

Construct	EO	IP	BS
Entrepreneurial Orientation	0.763		
Innovation Performance	0.732	0.790	
Business Sustainability	0.746	0.779	0.811

The examination of discriminant validity (DV) is the second step in assessing the measurement model, and it determines the level at which one variable differs from the other variables in the model (Table 3). In this study, we employed the Fornell-Larcker criterion to assess the DV (Henseler et al. 2015). Based on Table 3, discriminant validity with the Fornell-Larcker Criterion result shows that all three variables above are valid. This validity is because the correlation between variables itself has the highest number than other variables. Besides Fornell-Larcker Criterion, discriminant validity can also be view by Cross Loadings. Based on Table 4, all items are valid because each item has a higher number than other variables.

Table 4. Cross loadings

	Entrepreneurial Orientation	Innovation Performance	Business Sustainability
EO1	0.814	0.579	0.535
EO2	0.847	0.578	0.593
EO3	0.731	0.513	0.588
EO4	0.715	0.452	0.554
EO5	0.754	0.586	0.486
EO6	0.741	0.588	0.625
EO10	0.726	0.595	0.587
IP1	0.592	0.768	0.548
IP3	0.524	0.790	0.519
IP4	0.512	0.803	0.618
IP8	0.683	0.775	0.720
IP9	0.557	0.761	0.562
IP10	0.564	0.815	0.652
IP11	0.591	0.813	0.653
BS4	0.623	0.725	0.825
BS5	0.619	0.609	0.850
BS6	0.572	0.533	0.821
BS7	0.596	0.636	0.742

4.2 Structural Model

The structural model is examined to see how the exogenous variables affect the endogenous variable (Hair et al., 2017a). Two independent factors (EO and IP) and two dependent variables (IP and BS) are used in this study. The four primary criteria for evaluating a structural model are variance explained (R^2), effect size (f^2), predictive relevance (Q^2), and path coefficient (β), as well as the result of hypotheses testing (Chin, 2010; Hair et al., 2017a). Table 5 shows the outcomes of the current study's structural model, as well as the four criteria for evaluating the model.

From Table 5, the coefficient of determination (R^2) is used to determine the effect of exogenous variables on the endogenous variable. This study used adjusted R squared to determine the effect because it corrected on the standard error value and gives a more robust picture than R squared. Based on Table 5, Business Sustainability (BS) obtained 0.664 of R squared adjusted. The result means that 66.4% of business sustainability is affected by innovation performance and entrepreneurial orientation. Other than that, Innovation Performance obtained 0.638 of R squared adjusted. Therefore, 63.8% of innovation performance is affected by entrepreneurial orientation. The change in R^2 when a certain exogenous is removed from the model is referred to as effect size (f^2). It is worth noting that both Innovation Performance (0.484) and Business Sustainability (0.435) in the model had a medium effect size. The results of testing the model's prediction accuracy (Q^2) revealed that the path model's accuracy is satisfactory, with Q^2 values of 0.231 and 0.245 for BS and IP, respectively. As shown in Table 5, both Q^2 values are greater than 0, showing that EO (on IP and BS) and IP (on BS) factors are predictive.

Table 5. Path coefficients

	β	t-value	p-value	Supported?	R^2 Adj.	Q^2	f^2
EO → BS	0.377	2.607	0.012	Yes	0.664	0.231	0.435
EO → IP	0.426	3.638	0.000	Yes	0.638	0.245	0.484
IP → BS	0.416	4.345	0.000	Yes	0.664	0.231	0.435

After running the validity and reliability tests, the final step was to assess the significance of the relationships and developed hypotheses by running the test for bootstrapping with 5,000 subsamples that show the path coefficient in Table 5. The original sample is to find out whether the effect of variables is positive or negative. An effect is negative if there is a minus sign in the original sample number. If there is no minus sign, then the effect is positive. The significance of an effect can be seen on *t*-statistic or *p*-value. The two-tailed *t*-value should be > 1.960 and the *p*-value < 0.050 for a significant path on 5% error rate.

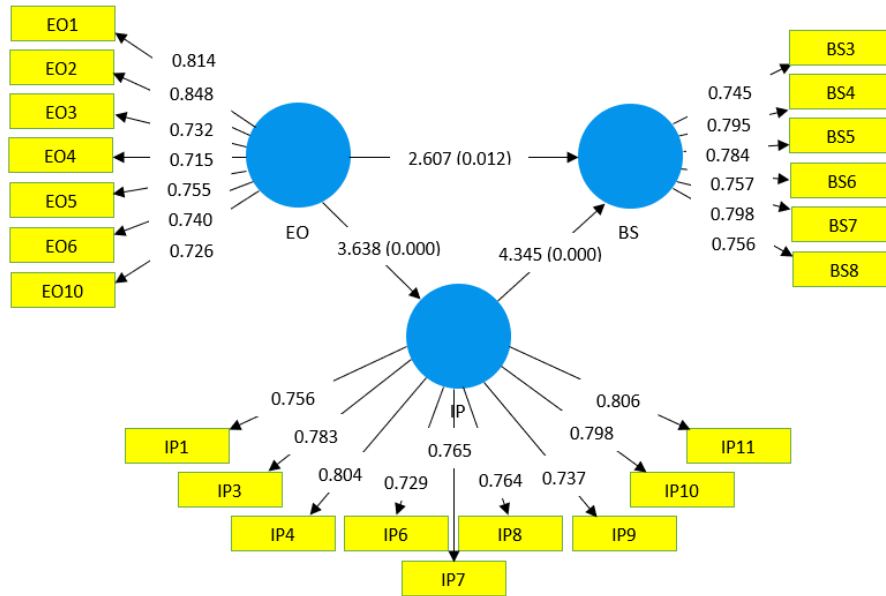


Figure 2. Measurement model of the study

To analyze the significance of the relationships, the path coefficients are calculated (see Table 5 and Figure 2). To do this, it is necessary to verify significance through the *t*-values and the strength of the relationships. The direct effect of entrepreneurial orientation towards business sustainability appears to be positive and significant ($\beta = 0.377/t = 2.607$). Thus, *H1* is supported, as business strategy that the young entrepreneurs possess is the greatest drive in the generation of profit to sustain their enterprises in this uncertain environment. The results are also supported by previous studies, e.g., Mohamad and Chin (2019), Ueasangkomsate (2019), and Susanti and Wibisono (2018). As proposed in *H2*, entrepreneurial orientation is positively associated with innovation performance ($\beta = 0.426/t = 3.638$). Young entrepreneurs' entrepreneurial perspective in formulating an innovation strategy is by being proactive in seeing market desires to offer solutions even in unstable conditions. Therefore, *H2* is accepted. Similar findings have been reported by Zhai et al. (2018), Kollmann et al. (2021), Adam et al. (2017). As proposed in *H3*, innovation performance is positively associated with business sustainability ($\beta = 0.416/t = 4.345$). It can be concluded that a company needs to continuously innovate to survive and be sustainable amidst the rapid change in technology, thus confirming *H3*. These findings are in line with the findings reported in past studies (see Li et al. 2020, Zhang et al. 2019).

5. Conclusion

This study aims to examine the effect of entrepreneurship orientation on the business sustainability and investigate the mediating effects of innovation performance. In this study, it is demonstrated that entrepreneurial orientation has a positive and significant influence on business sustainability. It can be concluded that the application of an optimal entrepreneurial orientation can result in a sustainable business. During this pandemic, more and more MSMEs are going online, this has an impact on the number of competitors. Young businessmen are encouraged to have an entrepreneurial spirit to dare to take risks and be proactive in determining business strategies. The application of the right entrepreneurial orientation is necessary to compete and create competitive advantages recommended to produce a sustainable business, by utilizing the existing e-business platform.

In addition, this study found that innovation performance has a positive and significant influence on business sustainability. It can be concluded that businesses that are conscious of the need to constantly produce, assess, and

successfully exploit new ideas have a better chance of surviving and prospering in the competitive global market. Currently, there are more and more competitors in e-business, which prompts young corporations to innovate in developing products or services and to be able to produce a sustainable business during the pandemic.

Finally, increasing entrepreneurial orientation during this pandemic is recommended to encourage innovation performance in a company or business. During this pandemic, many small businesses have emerged, which means there are more players. Therefore, a good entrepreneurial orientation can be used as a reference in determining the innovations that must be carried out so that they can become a competitive advantage for these small and medium enterprises.

Our sample can be pointed out as a limitation for a couple of reasons. First, we used a young e-business owners. Additionally, our population comprised mainly Indonesian people. Thus, in general, our findings could restrict the extent of our statistical generalizability. Second, while our results indicate that entrepreneurial orientation is conducive to both innovation performance and business sustainability, our study does not provide insights into how such orientation could be generated by the youths and what mechanism yield the better result.

Future studies may focus on other factors that are likely to affect the sustainability of SMEs. Secondly, since the primary objective of the study was achieved through commonly known methods, future researchers may wish to employ advanced methods and techniques in assessing different dimensions of each of the variables.

References

- Adam, S., Mahrous, A. A. and Kortam, W., The relationship between entrepreneurial orientation, marketing innovation and competitive marketing advantage of female entrepreneurs in Egypt, *International Journal of Technology Management and Sustainable Development*, vol. 16, no. 2, pp. 157-174, 2017.
- Albort-Morant, G., Leal-Rodríguez, A. L. and De Marchi, V., Absorptive capacity and relationship learning mechanisms as complementary drivers of green innovation performance, *Journal of Knowledge Management*, vol. 22, no. 2, pp. 432-452, 2018.
- Anderson, B. S., Kreiser, P. M., Kuratko, D. F., Hornsby, J. S. and Eshima, Y., Reconceptualizing entrepreneurial orientation, *Strategic Management Journal*, vol. 36, no. 10, pp. 1579-1596, 2014.
- Anggraeni, R., 85,42% UMKM Terancam Bangkrut, Cuma Tahan Covid-19 Selama 1 Tahun: Okezone Economy, Available: <https://economy.okezone.com/read/2020/08/06/320/2257905/85-42-umkm-terancam-bangkrut-cuma-tahan-covid-19-selama-1-tahun>, Aug 6, 2020.
- Baker, W. E. and Sinkula, J. M., The complementary effects of market orientation and entrepreneurial orientation on profitability in small businesses, *Journal of Small Business Management*, vol. 47, no. 4, pp. 443-464, 2009.
- Benitez, J., Castillo, A., Llorens, J. and Braojos, J., IT-enabled knowledge ambidexterity and innovation performance in small U.S. firms: The moderator role of social media capability, *Information and Management*, vol. 55, no. 1, pp. 131-143, 2018.
- Chin, W. W., How to write up and report PLS analyses, *Handbook of partial least squares*, Springer, 2010.
- Covin, J. G. and Wales, W. J., *Crafting high-impact entrepreneurial orientation research: Some suggested guidelines*, SAGE, Los Angeles, 2019.
- Diabate, A., Sibiri, H., Wang, L. and Yu, L., Assessing SMEs' sustainable growth through entrepreneurs' ability and entrepreneurial orientation: An insight into SMEs in Côte d'Ivoire, *Sustainability*, vol. 11, p. 7149, 2019.
- Dyllick, T. and Muff, K., What does sustainability for business really mean? And when is a business truly sustainable? In Jeanrenaud, S., Gosling, J. and Jeanrenaud, J. P. (eds.), *Sustainable business: A one planet approach*, Wiley, UK, 2017.
- Freixanet, J., Braojos, J., Rialp-Criado, A. and Rialp-Criado, J., Does international entrepreneurial orientation foster innovation performance? The mediating role of social media and open innovation, *The International Journal of Entrepreneurship and Innovation*, vol. XX, no. X, pp. 1-11, 2020.
- Geissdoerfer, M., Vladimirova, D. and Evans, S., Sustainable business model innovation: A review, *Journal of Cleaner Production*, vol. 198, pp. 401-416, 2018.
- Gross-Gołaacka, E., Kusterka-Jefmańska, M. and Jefmański, B., can elements of intellectual capital improve business sustainability? — The perspective of managers of SMEs in Poland, *Sustainability*, vol. 12, no. 4, 1545, 2020.
- Guo, Y. and Wang, L., Environmental entrepreneurial orientation and firm performance: The role of environmental innovation and stakeholder pressure, *SAGE Open*, vol. Jan-Mar, pp. 1-13, 2022.
- Hair, J. F. Hult, G. T. M., Ringle, C. and Sarstedt, M., *A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, SAGE Publications, 2017a.

- Hair, J. F., Sarstedt, M., Ringle, C. M. and Gudergan, S. P., *Advanced Issues in partial least squares structural equation modeling*, SAGE Publications, 2017b.
- Henseler, J., Ringle, C. M. and Sarstedt, M., A new criterion for assessing discriminant validity in variance-based structural equation modeling, *Journal of the Academy of Marketing Science*, vol. 43, pp. 115-135, 2015.
- Kollmann, T., Stöckmann, C., Niemand, T., Hensellek, S. and De Cruppe, K., A configurational approach to entrepreneurial orientation and cooperation explaining product/service innovation in digital vs. non-digital startups, *Journal of Business Research*, vol. 125C, pp. 508-519, 2021.
- Li, L., Msaad, H., Sun, H., Tan, M. X., Lu, Y. and Lau, A. K. W., Green innovation and business sustainability: New evidence from energy intensive industry in China, *International Journal of Environmental Research and Public Health*, vol. 17, no. 21, p. 7826, 2020.
- Lomborg, C., Urbig, D., Stöckmann, C., Marino, L. D. and Dickson, P. H., Entrepreneurial orientation: The dimensions' shared effects in explaining firm performance, *Entrepreneurship: Theory and Practice*, vol. 41, no. 6, pp. 973-998, 2017.
- Lumpkin, G. T. and Dess, G. G., Clarifying the entrepreneurial orientation construct and linking it to performance, *Academy of Management Review*, vol. 21, no. 1, pp. 135-172, 1996.
- Mohamad, M. A. and Chin, O., Business networking and sustainability of small rural business: Mediating effects of entrepreneurial orientation, *Management Science Letters*, vol. 9, no. 4, pp. 595-606, 2019.
- Parida, V., Pesämaa, O., Wincent, J. and Westerberg, M., Network capability, innovativeness, and performance: A multidimensional extension for entrepreneurship, *Entrepreneurship and Regional Development*, vol. 29, no. 1-2, pp. 94-115, 2017.
- Pradipto, Y. D., Barlian, E., Suprpto, A. T., Buana, Y., Bawono, A., Garnaditya, D. and Pangaribuan, C. H., The role of blockchain technology as a mediator between knowledge management and sustainable competitive advantage, *Proceedings of the 1st Sampoerna University-AFBE International Conference*, 2018.
- Rauter, R., Globocnik, D., Perl-Vorbach, E. and Baumgartner, R. J. Open innovation and its effects on economic and sustainability innovation performance, *Journal of Innovation and Knowledge*, vol. 4, no. 4, pp. 226-233, 2019.
- Rezaei, J. and Ortt, R., Entrepreneurial orientation and firm performance: The mediating role of functional performances, *Management Research Review*, vol. 41, no. 7, pp. 878-900, 2018.
- Shaher, A. T. Q. and Ali, K. A. M., The effect of entrepreneurial orientation and knowledge management on innovation performance: The mediation role of market orientation, *Management Science Letters*, vol. 10, pp. 3723-3734, 2020.
- Sharif, Z. F. and Arif, K. F., The role of entrepreneurial orientation in achieving organizational prosperity: An analytical study of a sample of administrative leaders in private universities in the Kurdistan region, *Review of International Geographical Education*, vol. 11, no. 10, pp. 1516-1538, 2021.
- Sok, P., Snell, L., Lee, W. J. (Thomas) and Sok, K. M., Linking entrepreneurial orientation and small service firm performance through marketing resources and marketing capability: A moderated mediation model, *Journal of Service Theory and Practice*, vol. 27, no. 1, pp. 231-249, 2017.
- Sung, C. S. and Park, J. Y., Sustainability orientation and entrepreneurship orientation: Is there a tradeoff relationship between them? *Sustainability*, vol. 10, p. 379, 2018.
- Susanti, A. and Wibisono, U., entrepreneurial thinking and successor's experience dealing with the family business continuity in Laweyan Batik Village and Kauman Surakarta, *Prosiding Seminar Nasional Unimus*, vol. 1, pp. 293-300, 2018.
- Svensson, G., Høgevold, N., Ferro, C., Varela, J. C. S., Padin, C. and Wagner, B., A triple bottom line dominant logic for business sustainability: Framework and empirical findings, *Journal of Business-to-Business Marketing*, vol. 23, no. 2, pp. 153-188, 2016.
- Ueasangkomsate, P., Entrepreneurial orientation for project sustainability and business success, *Proceedings of 2019 8th International Conference on Industrial Technology and Management*, 2019.
- Wales, W., Kraus, S., Filser, M., Stockmann, C. and Covin, J. G., The status quo of research on entrepreneurial orientation: Conversational landmarks and theoretical scaffolding, *Journal of Business Research*, vol. 128, pp. 564-577, 2021.
- Zhai, Y. M., Sun, W. Q., Tsai, S. B., Wang, Z., Zhao, Y. and Chen, Q., An empirical study on entrepreneurial orientation, absorptive capacity, and SMEs' innovation performance: A Sustainable perspective, *Sustainability*, vol. 10, no. 2, p. 314, 2018.
- Zhang, Y., Khan, U., Lee, S. and Salik, M., The influence of management innovation and technological innovation on organization performance. a mediating role of sustainability, *Sustainability (Switzerland)*, vol. 11, no. 2, 2019.

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