# Determinants of SME's performance: The role of knowledge management, market orientation, and product innovation

Wisnu Panggah Setiyono<sup>1\*</sup>, Mohammad Iqbal<sup>2</sup>, Rizal Alfisyahr<sup>3</sup>, Alshaf Pebrianggara<sup>4</sup>, Mukhammad Shofyan<sup>5</sup>

- <sup>1</sup> Department of Management, Faculty of Business, Law and Social Science, Universitas Muhammadiyah Sidoarjo, Sidoarjo, Indonesia
- <sup>2</sup> Department of Business Administration, Faculty of Administrative Science, Universitas Brawijaya, Malang, Indonesia
- <sup>3</sup> Department of Business Administration, Faculty of Administrative Science, Universitas Brawijaya, Malang, Indonesia
- <sup>4</sup> Department of Management, Faculty of Business, Law and Social Science, Universitas Muhammadiyah Sidoarjo, Sidoarjo, Indonesia
- <sup>5</sup> Department of Business Administration, Faculty of Administrative Science, Universitas Brawijaya, Malang, Indonesia
- \*Corresponding Author(s) Email: wisnu.setiyono@umsida.ac.id

# ABSTRACT

The role of knowledge management (KM) in the existence of Small Medium Enterprises (SME's) has been an important aspect of entrepreneurship. However, to perform an SME may not merely rely on its knowledge but also on other aspects such as market orientation and product innovation. This study aims to contribute to the entrepreneurship literature in the context of emerging economies. This study can be classified as quantitative research by nature as the use of a survey to gather respondent data. About 211 samples of SMEs of the furniture cluster in East Java were obtained in this study. Thus, understanding that the focus on market orientation and innovation in SMEs has not fruitfully been exposed and explored enough in the context of emerging economies such as Indonesia. The result of this study indicated that KM is not a direct predictor of SME performance. This is an indication that the supremacy creation of SME performance could not depend heavily on KM but rather, other driving forces such as market orientation (MO) and product innovation (INNOV) are much more powerful drivers in crafting SME performances.

Keywords: Knowledge Management; Market Orientation; Product Innovation; Performances; SME JEL Code: I25, I30, L26, M13

DOI:

10.31106/jema.v19i1.15036

Article History: Received 2022-01-31 Reviewed 2022-02-28 Revised 2022-03-06 Accepted 2022-03-30

Licensed: CC-BY

# Introduction

In some regions, Southeast Asian economic growth slowed from 5.3% in 2017 to 5.1% in 2018 and 4.4% in 2019 due to global trade friction and global economic uncertainty. Increasing demand. In 2020, the new coronavirus disease (COVID19) caused great turmoil in the global, regional and domestic economies. The Southeast Asian economy is expected to shrink by 2.7% in 2020. In Southeast Asia, MSME contributed an average of 41.1% to gross domestic product (GDP) between 2010 and 2019. MSME's contribution to 12 GDP increased moderately (CAGR of 2.3%). Indonesian MSME contributed a relatively high 61.1% to GDP in 2018 and grew at a total annual growth rate of 14.2% between 2010 and 2018. Thirteen MSME's from Brunei, Malaysia, Thailand, and Singapore contributed 35% to 45%. When. The country's GDP (annual average growth rate of 2.8% to 9.1%). In Indonesia, Thailand, and Malaysia, the ratio of MSME's GDP to GDP is gradually increasing over time. It decreased in Singapore but generally increased in Brunei. In US \$ and Indonesian dollars, MSME's registered US \$ 592 billion in 2018, followed by Thailand (the US \$ 216 billion), Singapore (the US \$ 149 Billion), and Malaysia (the US \$ 126 Billion).

Knowledge management is mentioned in the literature as the formalization and access to experience, knowledge, and expertise that enables superior performance, drives innovation, and creates new skills to acquire customer value (Majid, Bagram, & Khan, 2012). Knowledge management has a significant role in motivating individuals and firms to leverage their strategic orientation due to its nature as an important resource for any type of organization (Iqbal et al., 2020). Knowledge build-up is crucial for any type of firm as it allows a certain threshold to be achieved via entrepreneurial activities. Also, knowledge management encourages firms to set up their own goals and realize the growth and survival of a business in the long run. Nonetheless, knowledge management may not be the only driver to create supremacy of performance, but rather, other supporting drivers such as market orientation may be well seen as an effort to become competitive in the marketplace. Moreover, market orientation as a means of developing strategically oriented firms is one of the key prescriptions that must be able to be developed.

Market orientation as it is now defined is the setting of strategic consumer goals and building an organization focused on customer service, providing the basis of inward competition, and providing services that meet consumer expectations to win a competition (Tuominen et al., 2022). Moreover, market orientation employs customer focus as the basis for

# JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen, 19(1) 2022, 22-40 http://dx.doi.org/10.31106/jema.v19i1.15036, ISSN (Online) 2597-4017

determining the firm's strategic positioning in the market. Other than that, innovation could also be another detrimental factor that enhances SME's performance. In the context of Indonesia as an emerging market, innovation in SME's has not fruitfully been exposed and explored enough since this area of study is still relatively in its infancy despite it representing the majority of total firms in operation at present (Sofyan, 2019). As highlighted by Fagerberg et al. (2013) suggested that an economy with a high level of innovation tends to boost its level of productivity and income compared to those that are lacking. It is important to note that innovation-growth dyads are a significantly important aspect of a firm that unfolds within an innovative ecosystem. And due to those reasons, the important drivers of strategic orientation such as market orientation and innovation are important to be looked at in the context of Small and Medium Enterprises (SME's). It is important to note that SME's are a vital booster of growth for many economies and their contribution has been noted for several reasons: (a) important for rural economic development; (b) source of regional employment; and, (c) interactive place for entrepreneurship and business skill development (T. Tambunan, 2019). Nonetheless, they are vulnerable to constraints such as access to financial institutions (i.e., bank loans) as well as market access (T. Tambunan, 2019).

In the Indonesian context, SME's contribution to productivity growth has increased from 57.84% to 60.34% over the last five years, as reflected in GDP. Indicators of contribution to gross domestic product (GDP) formation and labor absorption have increased, but small and medium-sized enterprise (SME) sector access to the supply chain has increased. World production remains limited. Therefore, this study focuses on SME's in the East Java furniture group. This is one of the major drivers of the Indonesian economy, especially because SME's in East Java account for up to 54.98% of the total GDPR generated (Subagyo et al., 2020; Agustina et al., 2021).

#### **Literature Review**

#### The Knowledge Management Imperative

The era of the knowledge economy began in the twentieth century when the global industries had started a revolution to create a stable, superior, competitive, and information technology-based business climate. Due to those conditions, knowledge management strategies became a primary tool for organizations to achieve their goals to become competitive (Zaied & Zaied, 2012). Further, as an important thrust to obtain competitive advantage and improve performance alongside organization capabilities, knowledge management is utilized in the quest to improve process performance as well as the primary organizational threshold (Zaied,

2012). Nonetheless, knowledge management could not have existed as a sole ingredient of success for every organization, but rather, the presence of substantial orientation towards a particular market is also a key factor. Thus, the concept of market orientation might be useful in the process of achieving a desired organizational outcome via information processing, market knowledge as well as industrial foresight (Al Badi, 2019; Supriatna, 2020). As noted by Webster et al. (2018), a high level of market orientation is an indication that an organizational ability to achieve a certain performance threshold is present. Following these contentions, there is a relationship between the development of knowledge and market orientation. As such, Hult & Jr (2001) found that the effective integration of knowledge management with market orientation is an ability that functions as a strategic source for organizations.

# H<sub>1</sub>: Knowledge management positively influences market orientation

The contention that knowledge management determines economic benefits for organizations in ways for which accelerated innovation exists and minimizes fault timelines and cycles (Ullah et al., 2021), had triggered other studies to prove that knowledge management has a direct effect on the overall organizational performance (Marqués & Garrigos-Simon, 2006). While manufacturing remains the basis of development, globalization is changing the notion of competitiveness in developed countries, moving standardized manufacturing activities away from knowledge-based services (Christopherson et al., 2008). The world is transitioning from the natural resource-based industrial era to the year of knowledge-based skill-based education, research and development.

Knowledge drives innovation and is an important source of employment and economic growth in the global economy (Gulbranson & Audretsch, 2008). Knowledge helps innovation and is a vital supply of employment and financial increase withinside the international economy. Treating know-how because the organization's maximum vital effective asset is a principal component of society withinside the twenty-first century, other than conventional belongings inclusive of guide labor, capital, and technology. In the past, the principal price became the mass manufacturing of products and the assessment of their importance. Today, the principal region is occupied by manufacturers of bodily precious ideas, information, virtual codes, innovations, creativity, and services (Dickel & Moura, 2016).

The current meaning of competitiveness includes not only the technical performance and efficiency of a company or product but also the ability to develop systematic processes to identify opportunities. Overcome new technical and organizational obstacles through the creation and application of knowledge. Innovation Management aims to integrate mechanisms and tools, as well as methods and organizational forms. This enables organizations to innovate based on internal and external knowledge (Canongia et al., 2004). This study assumes that knowledge management is a factor that underpins the performance of SME's and is, therefore, a hypothesis related to this study:

#### H<sub>2</sub>: Knowledge management positively affects SME's performance

As Gharakhani & Mousakhani (2012) Companies with high knowledge production and management skills claim to have much higher innovation skills. This shows that knowledge management is an important element of innovation development (Andreeva & Kianto, 2012). According to Darroch (2005), for innovation to occur few attributes of knowledge within firms: (a) internal and external forces; (b) free flow of knowledge; and (c) responsiveness and agility must be able to be obtained. In organizations, Knowledge management is considered an essential prerequisite for innovation In addition, knowledge management encourages participation in innovation by creating new ideas and incorporating them into the organization's knowledge capital More specifically, the acquisition of externally generated knowledge gives individuals the opportunity to develop new knowledge and improve their ability to transform existing knowledge into new knowledge (C.-J. Chen & Huang, 2009). Therefore, the newly acquired knowledge effectively contributes to maximizing the stock of available knowledge and reducing uncertainty. As a result, the newly acquired knowledge provides an environment that leads to opportunities for innovative improvement and innovative thinking (Dahiyat & Al-Zu'bi, 2012). Several empirical studies have investigated the impact of knowledge management processes on product and process innovation (Kör & Maden, 2013). It has been found that the Turkish knowledge management process has a significant positive impact on innovation, which drives innovation in the organization (Bocquet et al., 2017). Experience shows that while process innovation in Luxembourg is related to workplace organizations, product innovation is strongly influenced by knowledge management (Donate & Sanchez de Pablo, 2014). Using a sample from a Spanish technology company, we found that Knowledge Management significantly controls the impact of knowledge-based leadership on product innovation (Andreeva & Kianto, 2011). Based on a sample of 221 companies in Finland, Russia, and China, it was concluded that the knowledge management process has a positive impact on innovation (Lundvall & Nielsen, 2007). Organizational practices related to learning and knowledge have been found to have a positive impact on Danish organizational innovation and dynamic performance (Bandeh Nezhad et al., 2012). We provide empirical evidence from Malaysian manufacturers about the impact of knowledge management practices on innovation. The study found that knowledge management practices such as knowledge sharing, knowledge translation, and knowledge storage have a positive impact on product and process innovation:

H<sub>3</sub>: Knowledge management positively influences product innovation

#### The Relationship of Market Orientation on SME's Performance

Market orientation claims to be a corporate culture that can effectively and efficiently initiate strategic actions aimed at creating value for customers (Amin et al., 2016). This means that market orientation is the benchmark for companies that see consumers as valuable people. Based on the resource-based model, companies with market-centric advantages are better placed to better understand customer needs and wants, and the capabilities of the competitors (Hult & Jr, 2001). In addition, MO is defined as a set of activities, processes, and behaviors that result from the implementation of a marketing concept and consists of three key components: (1) intelligence generation, (2) intelligence dissemination, and (3) responsiveness (Amin et al., 2016; Chao, 2014). It is important to be market-oriented, as SME's are dependent on a particular environment and culture. It's not just focused on the inside of the enterprise, it's a lot of places found in the enterprise network (Maaodhah et al., 2021). Some studies argue that market orientation is an important prerequisite for a company's performance (Maaodhah et al., 2021), and hence this study posits that

## H<sub>4</sub>: Market orientation positively affects SME's performance

# The Relationship of Product Innovation on SME's Performance

The paradigm of innovation as introduced by J. Chen et al. (2018) We claim that product innovation is the introduction of a brand new product or a new quality product to a customer who is new to it. The pioneering view of J. Chen et al. (2018) and Dabic et al. (2017) endorses that product innovation is a key determinant in each enterprise to boom a firm's marketplace share. According to Kotsemir & Abroskin (2013), innovation is an interactive outcome that results from the generation, development, and implementation of a series of new ideas. In addition, this process will later be transformed into a wide range of innovations: (a) products or services, (b) process technologies, (c) organizational structures, and, (4) managerial approaches (Azar & Rian, 2014).

Product innovation is one type of innovation that companies are particularly dependent on, with a particular focus on the manufacturing industry and the core of manufacturing tangible products. Continuing to innovate products is critical to the survival and performance of a company. As innovation capabilities increase, businesses can survive in the dynamics of the environment (Azar & Ciabuschi, 2017; Ferdilan et al., 2021). Thus, innovation is an important thrust of a firm's competitiveness that enhances performance (Azar & Rian, 2014). Following contention made in previous studies, this study posits that:

H<sub>5</sub>: Product innovation positively affects SME's performance

#### Mediating Role of Market Orientation and Product Innovation

The mediating role of market orientation in this study was developed following previous research (Ghahroudi et al., 2019). Chao (2014) suggested that market orientation is a missing link in the knowledge management chain that is capable of turning knowledge management into performance. Moreover, these arguments indicate that market orientation can enhance knowledge management in the quest for achieving performance, and therefore, the hypothesis relevant to this study is:

H<sub>6</sub>: Market orientation positively mediates the relationship between knowledge management and SME's performance

Also, the role of product innovation as mediation had been derived from previous research (Astuti et al., 2020; Prasetya et al., 2021). While market orientation is a key determinant to leveraging SME's performance, product innovation can also be another determinant that bridges the extent to which knowledge management's ability to intensify SME's performance. It is believed that knowledge management can be a thrust of SME's performance together with the role of strong product innovation.

H<sub>7</sub>: Product innovation positively mediates the relationship between knowledge management and SME's performance

# Methods

This survey uses a quantitative approach using statistical analysis as a survey tool. Statistical techniques are used in the form of descriptive and inference statistics. PLS-SEM was used as an inference statistical analysis tool. It is a powerful statistical tool because it can be applied to any data scale, does not require many assumptions, and allows you to see relationships that are not yet solidly grounded. In addition, it provides a more robust estimate of the structural model compared to CBSEM, especially if the assumptions are violated (Hair

et al., 2014). Not handiest that PLS may be used to expand or assemble hypotheses, it additionally has capabilities to expect complicated situations, in addition to functions that facilitate multivariate information analysis; In comparison to the preceding SEM primarily based totally on theoretical proof with parametric assumptions that should be met (Hair et al., 2014).

Constructs	Item	Mean	Standard Deviation	Outer Loading	Composite Reliability	AVE
	KM 1	4.643	0.775	0.868	0.961	0.530
	KM 2	4.471	0.776	0.817		
	KM 3	4.419	0.796	0.762		
	KM 4	4.438	0.755	0.775		
	KM 5	4.357	0.757	0.753		
	KM 6	4.305	0.782	0.715		
	KM 7	4.324	0.743	0.683		
	KM 8	4.081	0.950	0.558		
	KM 9	4.405	0.732	0.719		
	KM 10	4.386	0.816	0.689		
Knowledge	KM 11	4.324	0.889	0.574		
Management (KM)	KM 12	4.505	0.719	0.798		
	KM 13	4.448	0.756	0.811		
	KM 14	4.505	0.788	0.776		
	KM 15	4.400	0.757	0.778		
	KM 16	4.229	0.865	0.614		
	KM 17	4.314	0.734	0.734		
	KM 18	4.314	0.778	0.737		
	KM 19	4.300	0.868	0.606		
	KM 20	4.343	0.766	0.700		
	KM 21	4.381	0.791	0.706		
	KM 22	4.367	0.795	0.750		

# Table 1. Construct Measurements

JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen, 19(1) 2022, 22-40 http://dx.doi.org/10.31106/jema.v19i1.15036, ISSN (Online) 2597-4017

					Table 1 Continue		
Constructs	Item	Mean	Standard Deviation	Outer Loading	Composite Reliability	AVE	
Market Orientation (MO)	MO 1	4.238	0.845	0.739		0.545	
	MO 2	4.386	0.816	0.792			
	MO 3	4.424	0.785	0.824	0.904		
	MO 4	4.148	0.937	0.660			
	MO 5	4.357	0.787	0.826			
	MO 6	4.062	0.900	0.555			
	MO 7	4.329	0.751	0.763			
	MO 8	4.376	0.797	0.708			
Product Innovation (INNOV)	INNOV 1	4.462	0.698	0.832			
	INNOV 2	4.581	0.644	0.792	0.848	0.651	
	INNOV 3	4.481	0.678	0.795			
SME's Performance (P)	P 1	4.081	0.930	0.704	0.849	0.595	
	P 2	4.205	0.769	0.770			
	P 3	4.181	0.772	0.808		0.585	
	P 4	4.229	0.734	0.774			

The construct employed in this study adopts the use of established scales formed and derived from: (1) twenty-two items of KM from Hussinki et al. (2017); (2) eight items of MO from Kolar & Eržen (2006) work; (3) a three-item of Product Innovation from Ramadani et al. (2018); and (4) a four-item of SME's performance derived from Hanaysha (2020). These established scales were used based on their strength in addition to their internal and external validity of the concepts involved in previous studies. A simple random sampling technique was employed by utilizing the population from a homogeneous group of furniture clusters in the East Java Province of Indonesia. According to Sekaran & Bougie (2009), simple random sampling is best employed when the group being observed represent homogenous characteristic and the availability of a sample frame is present. In this study, the representation of SME owners in the furniture cluster can be considered relevant to such guidelines (Sekaran & Bougie, 2009) due to the similar characteristics that they possess. Data collection was carried out through a survey and the number of responses collected was 211 SME's of the furniture cluster in East Java Province of Indonesia.

Moreover, the convergent validity of each construct determined by the composite reliability measure showed strong results because most of the constructs exceeded the value of 0.70 (Table 1). All constructs have high composite reliability values: 0.961 (KM); 0.904 (MO); 0.848 (Product Innovation); and 0.849 (SME's Performance). Furthermore, each item measured using a five-point interval scale obtained an average value:  $\bar{x} = 4.47$  (KM),  $\bar{x} = 4.29$  (MO),  $\bar{x} = 4.51$  (INNOV), and  $\bar{x} = 4.17$  (P). The outer loading values in most of the variables showed very satisfactory results based on values above 0.7 and within the range of 0.5 to 0.6 were considered acceptable (Khidzir, Ismail, & Abdullah, 2018; Taber, 2018). Finally, the mean extracted variance (AVE) is a measure of commonality for each latent variable. Ab Hamid et al. (2017) argues that an adequate result of all variant exhibit value should be greater than 0.50 each. Thus, the measurement of the construct of this study can be considered robust

#### **Result and Discussion**

Demo	Freq.	Percentages (%)	
Gender	Male	157	78.11
	Female	54	21.89
Age	< 30 - 36	21	10.45
	37 - 43	35	17.41
	44 - 50	49	24.38
	51 - 57	59	29.35
	> 58	37	18.41
SME's Length of	< 5 years	4	1.99
Business Operation	5 – 10 years	8	3.98
	11 – 20 years	56	27.86
	> 20 years	133	66.17
Number of Employees	5 – 10	136	67.66
	11 – 15	36	17.91
	> 16	29	12.94
SME's Revenue (IDR)	< 250 Million	32	15.92
	250 Million - 999 Million	110	54.73
	1 Billion – 2 Billion	34	16.92
	> 2 Billion	25	12.44

#### Table 2. Demographic Profiles

JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen, 19(1) 2022, 22-40 http://dx.doi.org/10.31106/jema.v19i1.15036, ISSN (Online) 2597-4017

The results of the demographic analysis (Table 2) show that most of the respondents in this study were male, ranging from 44 to 50 years old (24.38%) and 51 to 57 years (29.35%). Furthermore, most SME owners have operated their business for more than 20 years (66.17%) with the number of workers ranging from 1 to 5 workers (67.66%) as well as having a sales turnover of IDR 250 Million - IDR 999 Million. The demography characteristics were similar that those of in previous studies, particularly in the Indonesian SME context (Sofyan, 2019; Subagyo et al., 2020; T. T. H. Tambunan, 2021).

Hypotheses	Direct Effect (ß)	Indirect Effect (ß)	t-Score	Probability	Decision
$H_1 KM \rightarrow MO$	0.91		25.08	0.00***	Accepted
$H_2 KM \rightarrow P$	0.09		0.41	0.68	Rejected
$H_3 KM \rightarrow INNOV$	0.72		6.45	0.00***	Accepted
$H_4 MO \rightarrow P$	0.22		1.68	0.09*	Accepted
$H_5 INNO \rightarrow P$	0.44		2.38	0.02**	Accepted
$\mathrm{H}_{6}\mathrm{KM}  \mathrm{MO}  \mathrm{P}$		0.21	1.68	0.09*	Accepted
$H_7 \text{ KM} \rightarrow \text{INNOV} \rightarrow P$		0.31	2.41	0.02**	Accepted

#### **Table 3.** Hypotheses Testing

N = 211

 $\mathbf{R}^2 = \mathbf{P}$  (0.48); INNOV (0.51); MO (0.83)

*Sig at p-value*<0.01\*\*\*, *p-value*<0.05\*\*, *p-value*<0.1\*

The seven hypotheses proposed in this study were analyzed and tested using PLS Model following Henseler et al. (2016) guidance. The results of the analysis show that the proposed model can predict SME's performance, product innovation, and market orientation as the R-Square value amounted to: 0.476, 0.514, and 0.829 respectively. Table 3 shows that most of the hypotheses of the study were supported (H<sub>1</sub>, H<sub>3</sub>, H<sub>4</sub>, H<sub>5</sub>, H<sub>6</sub>, H<sub>7</sub>) as the p-value of each hypothesis was lower than the critical value of 0.05 and 0.10 (0.00, 0.00, 0.09, 0.02, 0.09, 0.02). This study shows that KM positively affects MO ( $\beta$ =0.91) and product innovation ( $\beta$ =0.72), it is assumed that the stronger KM possessed by SME owners, the more market orientation is further needed to become competitive. Similarly, a stronger KM also will boost product innovation, as the main thrust in the quest for competitive advantage (Zaied, 2012). This finding is consistent with previous studies that posit that KM can create organizational creativity (Lee & Choi, 2003), leading KM practices to significantly influence SME's

performance (Marqués & Garrigos-Simon, 2006). In the context of this study, the SME's can adopt KM practices that nurture MO as well as their product innovation that assists them to create products relevant to their customers. With shifts in market tastes and preferences, this study is also consistent with previous studies that measured the influence of KM on MO (Casablancas-Segura, 2013). Also, KM has been able to increase product innovation which is an important element in the sustainability of a business, these results indicate that the KM process is measured by knowledge creation, knowledge accumulation, knowledge sharing, and knowledge utilization (Teo & Bhattacherjee, 2013) which had been able to demonstrate the innovation ability of furniture SME's to innovate their products. Other than that argument (Wahyuni & Sara, 2020) implicitly suggests and acknowledges that KM drives economic impact in an indirect interaction, this explains why the relationship between KM and SME's performance had no significance since SME's performance is indicated by how much revenue and costs are involved (Hanaysha, 2020). Hence, it is necessary to develop and employ the SME's performance indicators other than financial performance.





The results of the analysis also show that MO has a positive and significant relationship to SME performance ( $\beta$ =0.225). This finding is linear with the results of previous studies (Rita & Huruta, 2020). It is an indication that MO acts as a thrust to boost SME's performance.

Concerning product innovation, the result indicates that the ability of SMEs to carry out product adaptation processes is increasing in line with an increased SME's performance. This is consistent with the results shown in previous research (Azar & Ciabuschi, 2017). The role of MO and product innovation as parameters in this study was used to determine if these two variables could play a role in mediating the relationship between knowledge management and organizational performance. Therefore, this result shows that MO and product innovation are the strategic impetus to bridge KM to achieve the performance of certain SME's. Findings are in line with previous studies (Azari et al., 2015; Benner & Tushman, 2003; Solikahan & Mohammad, 2019), although it contradicts the results of a few previous research (Ghahroudi et al., 2019). This shows that the results of the study are inconsistent between cultures and are worth further development in the MO and INNOV context.

#### **Conclusion and Suggestion**

This study provides an empirical study to determine the impact of knowledge management, market orientation, product innovation, and indoor SME performance in East Java, Indonesia. The results show that while KM has a partial impact on market orientation and product innovation, product innovation acts as a complete intermediary in the relationship between knowledge management and SME performance. In addition, KM does not directly impact SME performance but must be leveraged through market orientation and product innovation.

The study also focuses on the growing needs of market-oriented SME's, even though SME's are generally competing for product models that are the result of product innovation. It provides the implications and tools for planners to develop ongoing business practices for SME's. Therefore, the government must be able to provide continuous provision and support to strengthen knowledge as an important aspect of entrepreneurship. In addition, scholars need to focus on investigating determinants of KM and other progenitor cells that may not have been investigated in this study. Determinants such as learning motivation and entrepreneurial activity and market-oriented precursors such as innovative abilities can also be used for further research in entrepreneurship research, especially in emerging markets. Despite the findings and discussions, this study is not without its limitations. This study focuses only on specific clusters of small businesses such as furniture, and the characteristics are assumed to be uniform. To expand the literature on entrepreneurship in emerging markets, future research will dig deeper into other small business clusters such as apparel, food processing, and other related small industry clusters, with consistent results.

# References

- Ab Hamid, M. R., Sami, W., & Mohmad Sidek, M. H. (2017). Discriminant Validity Assessment: Use of Fornell & Larcker criterion versus HTMT Criterion. *Journal of Physics: Conference Series*, 890(1), 3–7. https://doi.org/10.1088/1742-6596/890/1/012163
- Agustina, I., Ajis, M. N. E. B., & Pradesa, H. A. (2021). Entrepreneurs perceived risk and risk taking behavior in the small-sized creative businesses of tourism sector during COVID-19 pandemic. *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, 18(2), 187-209. http://dx.doi.org/10.31106/jema.v18i2.12563
- Al Badi, K. (2019). Implementation of marketing concept and organizational culture in SMEs in Al Buraimi – Oman. *Benchmarking*, 26(7), 2401–2414. https://doi.org/10.1108/BIJ-05-2018-0136
- Amin, M., Thurasamy, R., Aldakhil, A. M., & Kaswuri, A. H. Bin. (2016). The effect of market orientation as a mediating variable in the relationship between entrepreneurial orientation and SMEs performance. *Nankai Business Review International*, 7(1), 39–59. https://doi.org/10.1108/NBRI-08-2015-0019
- Andreeva, T., & Kianto, A. (2011). Knowledge processes, knowledge-intensity and innovation: A moderated mediation analysis. J. Knowledge Management, 15. https://doi.org/10.1108/13673271111179343
- Andreeva, T., & Kianto, A. (2012). Does knowledge management really matter? Linking knowledge management practices, competitiveness and economic performance. *Journal* of Knowledge Management, 16, 617–636. https://doi.org/10.1108/13673271211246185
- Astuti, E., Sanawiri, B., & Iqbal, M. (2020). Attributes of innovation, digital technology and their impact on SME performance in Indonesia. https://doi.org/10.6084/m9.figshare.12228692
- Azar, G., & Ciabuschi, F. (2017). Organizational Innovation, Technological Innovation, and Export Performance: The Effects of Innovation Radicalness and Extensiveness. *International Business Review*, 26, 324–336. https://doi.org/10.1016/j.ibusrev.2016.09.002
- Azar, G., & Rian, D. (2014). Psychic Distance, Innovation, and Firm Performance. Management International Review, 54, 581–613. https://doi.org/10.1007/s11575-014-0219-2

- Azari, A., Rezaei Kalantary, R., Kakavandi, B., Ahmadi, E., Farzadkia, M., & Ghanizadeh, G. (2015). Iron — silver oxide nanoadsorbent synthesized by co-precipitation process for Fluoride removal from aqueous solution and its adsorption mechanism. *RSC Adv.*, 5. https://doi.org/10.1039/C5RA17595J
- Bandeh Nezhad, M., Zailani, S., & Fernando, Y. (2012). An empirical study on the contribution of lean practices to environmental performance of the manufacturing firms in northern region of Malaysia. *International Journal of Value Chain Management*, 6. https://doi.org/10.1504/IJVCM.2012.048379
- Benner, M., & Tushman, M. (2003). Exploitation, Exploration, and Process Management: The Productivity Dilemma Revisited. *The Academy of Management Review*, 28, 238–256.
- Bocquet, R., Le Bas, C., Mothe, C., & Poussing, N. (2017). CSR, Innovation, and Firm Performance in Sluggish Growth Contexts: A Firm-Level Empirical Analysis. *Journal of Business Ethics*. https://doi.org/10.1007/s10551-015-2959-8
- Canongia, C., Santos, D., Santos, M., & Zackiewicz, M. (2004). Foresight, competitive intelligence and knowledge management as innovation management tools. *Gestão & Produção*, *11*, 231–238.
- Casablancas-Segura, C. (2013). Stratgeic marketing and societal orientation in the Spanish public universities: An empirical analysis.
- Chao, M. C. (2014). The Journey from Market Orientation to New Product Performance in the Host Country: A Knowledge and Learning Perspective. *Journal of Marketing Development and Competitiveness*, 8(1), 62–73.
- Chen, C.-J., & Huang, J.-W. (2009). Strategic Human Resource Practices and Innovation Performance – The Mediating Role of Knowledge Management Capacity. *Journal of Business Research*, 62, 104–114. https://doi.org/10.1016/j.jbusres.2007.11.016
- Chen, J., Yin, X., & Mei, L. (2018). Holistic Innovation: An Emerging Innovation Paradigm. *International Journal of Innovation Studies*, 2(1), 1–13. https://doi.org/10.1016/j.ijis.2018.02.001
- Chibuzor, A., Jovita, O., & Ugwuegbu, C. (2019). *Knowledge management and organizational innovation*.
- Christopherson, S., Garretsen, H., & Martin, R. (2008). The World is Not Flat: Putting Globalization in its Place. *Cambridge Journal of Regions Economy and Society*, *1*. https://doi.org/10.1093/cjres/rsn023
- Dabic, M., Basic, M., & Vlajcic, D. (2017). Setting the Scene: Defining Open Innovation

Introduction To the Open Innovation Paradigm. ResearchGate, (December 2016).

- Dahiyat, S. (2015). An integrated model of knowledge acquisition and innovation: Examining the mediation effects of knowledge integration and knowledge application. *International Journal of Learning and Change*, 8, 101–135. https://doi.org/10.1504/IJLC.2015.074064
- Dahiyat, S., & Al-Zu'bi, Z. (2012). The role of knowledge acquisition in facilitating customer involvement in product development: examining the mediation effect of absorptive capacity. *International Journal of Learning and Change*, 6, 171–206. https://doi.org/10.1504/IJLC.2012.050868
- Darroch, J. (2005). Knowledge management, innovation and firm performance. *J. Knowledge Management*, *9*, 101–115. https://doi.org/10.1108/13673270510602809
- Dickel, D., & Moura, G. (2016). Organizational performance evaluation in intangible criteria: a model based on knowledge management and innovation management. *Revista de Administração e Inovação (No Prelo)*. https://doi.org/10.1016/j.rai.2016.06.005
- Donate, M., & Sanchez de Pablo, J. D. (2014). The role of knowledge-oriented leadership in knowledge management practices and innovation. *Journal of Business Research*, 68. https://doi.org/10.1016/j.jbusres.2014.06.022
- Fagerberg, J., Martin, B. R., & Andersen, E. S. (2013). Innovation studies: Towards a new agenda. *Innovation studies: Evolution and future challenges*, 1-20.
- Ferdilan, R., Dhewanto, W., & Rustiadi, S. (2021). Evaluations of an entrepreneurship development program: A systematic literature review. *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, 18(2), 107-136. http://dx.doi.org/10.31106/jema.v18i2.11461
- Ghahroudi, M., Yasuo, H., & Ahmadpoury, F. (2019). The Impact of Knowledge Management Orientation on New Product Commercialization: The Mediating Role of Market Orientation. American Journal of Industrial and Business Management, 09, 1949–1968. https://doi.org/10.4236/ajibm.2019.910127
- Gharakhani, D., & Mousakhani, M. (2012). Knowledge management capabilities and SMEs' organizational performance. *Journal of Chinese Entrepreneurship*, 4(1), 35–49. https://doi.org/10.1108/17561391211200920
- Gulbranson, C., & Audretsch, D. (2008). Proof of Concept Centers: Accelerating the Commercialization of University Innovation. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.1090575
- Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial Least Squares StructuralEquation Modeling (PLS-SEM): An Emerging Tool for Business Research. *European*

Business Review, 26, 106-121. https://doi.org/10.1108/EBR-10-2013-0128

- Hanaysha, J. (2020). Innovation Capabilities and Authentic Leadership: Do They Really Matter
  to Firm Performance? *Journal of Asia-Pacific Business*, 21, 1–20. https://doi.org/10.1080/10599231.2020.1824523
- Henseler, J., Hubona, G., & Ray, P. (2016). Using PLS Path Modeling in New Technology Research: Updated Guidelines. *Industrial Management & amp Data Systems*, 116, 2–20. https://doi.org/10.1108/IMDS-09-2015-0382
- Hult, G. T. M., & Jr, D. (2001). Does Market Orientation Matter?: A Test of the Relationship Between Positional Advantage and Performance. *Strategic Management Journal*, 22, 899–906. https://doi.org/10.1002/smj.197
- Hussinki, H., Ritala, P., Vanhala, M., & Kianto, A. (2017). Intellectual capital, knowledge management practices and firm performance. *Journal of Intellectual Capital*, 18, 0. https://doi.org/10.1108/JIC-11-2016-0116
- Iqbal, M., Abid, I., Hussain, S., Shahzad, N., Waqas, M., & Iqbal, M. (2020). The effects of regional climatic condition on the spread of COVID-19 at global scale. *Science of The Total Environment*, 739, 140101. https://doi.org/10.1016/j.scitotenv.2020.140101
- Khidzir, K. A. M., Ismail, N. Z., & Abdullah, A. R. (2018). Validity and reliability of instrument to measure social media skills among small and medium entrepreneurs at Pengkalan Datu River. *International Journal of Development and Sustainability*, 7(3), 1026–1037.
- Kolar, L., & Eržen, N. (2006). Veterinary parasiticides-are they posing an environmental risk? *Slov Vet Res*, 43, 85–96.
- Kör, B., & Maden, C. (2013). The Relationship between Knowledge Management and Innovation in Turkish Service and High-Tech Firms. *International Journal of Social Science and Business*, 4, 293–304.
- Kotsemir, M. N., & Abroskin, A. (2013). Innovation Concepts and Typology An Evolutionary Discussion. SSRN Electronic Journal, 2–49. https://doi.org/10.2139/ssrn.2221299
- Lee, H., & Choi, B. (2003). Knowledge Management Enablers, Processes, and Organizational Performance: An Integrative View and Empirical Examination. J. of Management Information Systems, 20, 179–228. https://doi.org/10.1080/07421222.2003.11045756
- Lundvall, B.-Å., & Nielsen, P. (2007). Knowledge management and innovation performance.InternationalJournalofManpower,28,207–223.

https://doi.org/10.1108/01437720710755218

- Maaodhah, A., Singh, H., Mohammed, Z., Bin, A., & Iwuchukwu, E. (2021). The Impact of Market Orientation and Entrepreneurial Orientation on Firm Performance of Wholesale and Retailer SMES in Malaysia. *International Journal of Academic Research in Business* and Social Sciences, 11, 2222–6990. https://doi.org/10.6007/IJARBSS/v11-i6/10019
- Majid, M., Bagram, M., & Khan, S. (2012). Attaining Customer Loyalty: the Role of Consumer Attitude and Consumer Behavior. *International Review of Management and Business Research*, 1(2012), 1–8.
- Marqués, D., & Garrigos-Simon, F. (2006). The effect of knowledge management practices on firm performance. *Journal of Knowledge Management*, 10, 143–156. https://doi.org/10.1108/13673270610670911
- Prasetya, A., Rahardjo, K., Mawardi, M. K., Hidayat, R. R., & Prakasa, Y. (2021). The mediation role of financial literation in ensuring MSMEs sustainability: An organizational characteristics perspective. *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, *18*(1), 61-79. http://dx.doi.org/10.31106/jema.v18i1.10356
- Ramadani, V., Hisrich, R., Abazi, H., Dana, L.-P., Panthi, L., & Abazi Bexheti, L. (2018). Product innovation and firm performance in transition economies: A multi-stage estimation approach. *Technological Forecasting and Social Change*, 140. https://doi.org/10.1016/j.techfore.2018.12.010
- Rita, M. R., & Huruta, A. D. (2020). Financing access and SME performance: A case study from batik SME in Indonesia. *International Journal of Innovation, Creativity and Change*, 12(12), 203–224.
- Sekaran, U., & Bougie, R. (2009). Research Methods for Business: A Skill Building Approach (5th Edition). *International Journal of Information Technology and Management IJITM*.
- Sofyan, M. (2019). Success factors of SMEs: the case of Indonesia. *International Journal of Business Innovation and Research*, *19*, 1. https://doi.org/10.1504/IJBIR.2019.10014223
- Solikahan, E. Z., & Mohammad, A. A. (2019). Entrepreneurial Orienta-tion, Market Orientation and Financial Orientation in Supporting the Performance of Karawo SMEs in Gorontalo City. *Journal of Applied Management*, 17(4), 729–740.
- Subagyo, N. A., Kumar, V., & Ernestivita, G. (2020). Entrepreneurial parameters and performance of MSMEs in East Java province of Indonesia. *International Journal of Business Innovation and Research*, 23, 267. https://doi.org/10.1504/IJBIR.2020.110102

Supriatna, M. D. (2020). Knowledge sharing activities among public sector employees:

Evidence from Indonesia. *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, *17*(2), 121-134. http://dx.doi.org/10.31106/jema.v17i2.6686

- Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, 48(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2
- Tambunan, T. (2019). Recent evidence of the development of micro, small and medium enterprises in Indonesia. *Journal of Global Entrepreneurship Research*, 9. https://doi.org/10.1186/s40497-018-0140-4
- Tambunan, T. T. H. (2021). Export of Indonesian MSEs and the role of partnership. *Journal of Developing Economies*, 6(2), 235. https://doi.org/10.20473/jde.v6i2.28747
- Teo, T., & Bhattacherjee, A. (2013). Knowledge Transfer and Utilization in IT Outsourcing Partnerships: A Preliminary Model of Antecedents and Outcomes. *Information & Management*, 51. https://doi.org/10.1016/j.im.2013.12.001
- Tuominen, S., Reijonen, H., Nagy, G., Buratti, A., & Laukkanen, T. (2022). Customer-centric strategy driving innovativeness and business growth in international markets. *International Marketing Review*. https://doi.org/10.1108/IMR-09-2020-0215
- Ullah, M., Shaikh, M., Jadoon, I. A., Khan, M. A., & Alizai, S. H. (2021). the Contagion Effects of Covid-19 Pandemic on Cryptocurrencies. *Humanities & Social Sciences Reviews*, 9(2), 370–379. https://doi.org/10.18510/hssr.2021.9236
- Wahyuni, N. M., & Sara, I. M. (2020). The effect of entrepreneurial orientation variables on business performance in the SME industry context. *Journal of Workplace Learning*, 32(1), 35–62. https://doi.org/10.1108/JWL-03-2019-0033
- Webster, R., Curry, J., & Hammond, K. (2018). Market Orientation towards Students and Organizational Performance: Perceptions of Accounting Department Chairpersons of Public and Private Business Schools Belonging to AACSB. *International Journal of Business and Social Science*, 9. https://doi.org/10.30845/ijbss.v9n6a1
- Zaied, A. N. (2012). An Integrated Knowledge Management Capabilities Framework for Assessing Organizational Performance. *International Journal of Information Technology* and Computer Science, 4, 1–10. https://doi.org/10.5815/ijitcs.2012.02.01
- Zaied, A. N., & Zaied, H. (2012). The Role of Knowledge Management in Enhancing Organizational Performance. I.J. Information Engineering and Electronic Business, 4, 27–35. https://doi.org/10.5815/ijieeb.2012.05.04