Effect of Knowledge Management Capabilities and Entrepreneurial Orientation Towards Competitive Advantage: A Study on Small Businesses in Banten Province, Indonesia

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ABSTRACT

This study analyses the influence of knowledge management capabilities (KMCs) and entrepreneur orientation on competitive advantages in small businesses managed by women entrepreneurs in Banten Province, Indonesia. This research method uses the explanatory survey method with a quantitative approach. The data were collected by surveying the businesses using instruments in the form of questionnaires. Data were analysed by using partial least squares structural equation modelling. Results are as follows. Firstly, KMCs partially have a positive and significant effect on entrepreneurial orientation. Secondly, KMCs partially have a positive but nonsignificant effect on competitive advantage. Thirdly, entrepreneurial orientation has a partially positive but nonsignificant influence on competitive advantage. Fourthly, KMCs and entrepreneurial orientation have a positive and significant effect on competitive advantage. The study presents three conclusions. Firstly, knowledge of new products is a knowledge resource that women-run small businesses use to respond quickly to the market. Secondly, knowledge resources related to information opportunities in the market are not quickly acquired by organisations; hence, such knowledge resources cannot be translated to competitive advantage. Thirdly, technological developments affect the movement of change tendencies that encourage business actors to be adaptive and creative in creating products that meet the needs of society. Such competitive actions become competitive advantages.

Keywords: Knowledge management capabilities; entrepreneurial orientation; competitive advantage; small business; Banten Province.

1. INTRODUCTION

Small businesses today are in the knowledge era supported by the infrastructure of Industry 4.0. As such, small businesses must build a strong competitive advantage, one example of which

occurred in Banten Province, Indonesia. According to the Bank Indonesia (2020), the total number of small businesses in Indonesia in 2018 reached 57.83 million. Of these, more than 60% are managed by women. This percentage can suggest the percentage of small businesses in Banten. Research (Aziz & Samad, 2016; Mahmood & Hanafi, 2013; Wingwon, 2012; Zainol & Al Mamun, 2018) revealed that competitive advantage is an important variable to improve the performance of small companies managed by women entrepreneurs. Another crucial variable is entrepreneurial orientation (Chen & Miller, 2015). Research on small businesses managed by women entrepreneurs shows that they can excel in a competitive environment if they adopt an entrepreneurial orientation (Lim & Envick, 2013; Mahmood & Hanafi, 2013). By conducting an empirical study, Lim and Envick (2013) found important differences in the entrepreneurial orientation of men and women, as follows. (1) Men tend to engage in highlevel risk-taking more than women do. (2) Men are more often involved in innovation than women. (3) Men are more aggressive in their business management than women. (4) Although men and women entrepreneurs both value autonomy, autonomy is more prevalent among men entrepreneurs because men tend to rely less on partners, family and friends for help and support.

Studies on small businesses managed by women in Banten Province reveal interesting phenomena. Firstly, the mass marketing of such small businesses is reaching a growing number of consumers. Secondly, communication between suppliers and customers is becoming closer, thereby enabling small businesses to respond quickly to consumer requests, anticipate customer needs, exploit new opportunities and enhance communication by developing mobile applications. Thirdly, even though the quantity and quality of competition increase, small businesses tend to be more agile in responding to changes in competition. Fourthly, the current COVID-19 pandemic shows the flexibility that can be gained by businesses that possess abundant knowledge and information capacity.

Apart from these phenomena, a unique behaviour of Banten women entrepreneurs is their proactive participation in various *webinars* organised by institutions such as Indonesian Women Entrepreneurs Association or *Ikatan Wanita Pengusaha Indonesia (IWAPI)* and Indonesian Islamic Women Entrepreneurs Association or *Ikatan Pengusaha Muslimah Indonesia (IPEMI)*. The increasing capacity for knowledge and information drives small businesses to explore various opportunities and respond to competition innovatively, quickly and flexibly.

2. LITERATURE REVIEW

Knowledge management researchers on small businesses such as Bruno (2017), Łuczka and Małecka (2018) and Martinsons et al. (2017) found that in the era of the knowledge economy, small businesses must utilise knowledge as an intangible resource to achieve competitive advantage. Knowledge can be utilised by cultivating activities to create, disseminate and use knowledge effectively. Previous researchers (Bari & Arshad, 2019; Kanapathipillai & Azam, 2019; Marques et al., 2018; Octavia et al., 2015) stated that the study of knowledge management in small businesses managed by women entrepreneurs is a challenge in itself. On the one hand, small businesses have various limitations such as limited tangible resources and social and cultural barriers. On the other hand, knowledge management of women entrepreneurs has distinctive and unique characteristics.

Yew Wong and Aspinwall (2004) stated the need for knowledge management studies in small businesses and encouraged two complementary perspectives. Firstly, the 'pull perspective' explains the potential benefits of managing the crucial knowledge for small businesses such as improving competence, efficiency, innovation and learning. Secondly, the 'push perspective' explains the importance of knowledge management for small businesses in the face of external or environmental pressures such as competition, globalisation and large

corporate pressures. These perspectives make small businesses agile in adopting *k*nowledge-based organisations. From the knowledge base view perspective, the management of knowledge in small businesses provides new tools to survive, grow and maintain competitive advantage because knowledge is a new organisational resource in the era of the knowledge economy (Sheikh, 2008; Vazquez-Avila *et al.*, 2012).

Yew Wong and Aspinwall (2004) indicated the necessity for women entrepreneurs to explore and look back at their organisations through the lens of knowledge structures instead of physical assets and see the importance of developing intangible assets.

Asset management knowledge affects a company's ability to develop capabilities (Delgado-Verde et al., 2011). Intangible capabilities are difficult to replicate, and the consequences must be shouldered by the company (Khan et al., 2019). Ownership of inherent knowledge makes capability a source of competitive advantage (Grant, 2009). Human capital theory states that the growth of a company, not only in profit, but in educational experiences that encourage learning and the ability to innovate, forms the basis for the creation of competitive advantage (Shigang, 2010).

Edvardsson and Durst (2013), Lim and Klobas (2000), Pillania (2008) and Wong (2005) suggested that small business knowledge management research pays attention to the characteristics of knowledge management infrastructure and processes that are typical in small businesses. These characteristics include being *tacit* (Egbu, 2006), informally managed (Nunes et al., 2006), easily disseminated (Smith, 2001) and faced with limited resources.

Entrepreneurial orientation is one of the factors that can improve the performance of a business. The characteristics of entrepreneurial orientation can be seen from several aspects, such as the need for achievement, internal locus of control, self-reliance and extroversion (Tresna and Raharaja, 2019). This statement in line with the finding of Afendi et al. (2015) that entrepreneurial orientation and market orientation exert a positive effect on firm business performance.

Jennings and Beaver (1997) assessed competitive advantages in small businesses from the past decade. Bressler (2012) indicated that most research focuses on competitive advantage in medium-sized enterprises with little attention paid to small companies, although the concept of competitive advantage is becoming the subject of growing research on small businesses. Furthermore, the concept of competitive advantages of medium or small and medium enterprises can be applied in the context of small businesses.

Bressler (2012) explained that competitive advantage in small businesses is different from that in large companies. *Firstly*, in small companies, entrepreneurs determine only one or two competitors that are determined by their world-view, whereas large companies rely on a broader analysis of industry competition (O'Donnell et al., 2002). *Secondly*, small businesses have higher confidence in meeting expected needs when competing with large companies because small businesses have a closer relationship with consumers (O'Donnell et al., 2002). *Thirdly*, the competitive advantage of small businesses relies heavily on the perception of their owners (O'Donnell et al., 2002). O'Donnell et al. (2002) also expressed the unique advantages of competitive advantage of small businesses that distinguish them from other similar small businesses; these advantages can be used to win against competition.

Hitt et al. (2011) stated that the strategic entrepreneurship input, process and output model is designed in a resource-based view (RBV) perspective. Considering RBV perspective and developments in knowledge management in small businesses, this study developed an input model, process and output entrepreneurship strategy from the knowledge-based view (KBV) perspective. The next consideration is the view of Conner and Prahalad (2002), who argued that KBV is the core of RBV. Conner and Prahald's argument can be seen from the fact that organisations are heterogeneous entities full of knowledge (Hoskisson et al., 1999).

Resource-based organisations are ultimately knowledge asset-based organisations (Roos et al., 1997; Stewart, 1997; Sveiby, 2001; Marr, 2004). Even RBV itself suggests that organisations have unique intangible resources (Rouse & Daellenbach, 2002).).

The development of strategic entrepreneurship based on knowledge management capability (KMC) refers to the opinions of KBV experts claiming that the main role of a company in the current era of the knowledge economy is to create, store and apply knowledge in the framework of long-term survival (Grant, 1996; Valkokari & Helander, 2007). Furthermore, James (2004) stated that KMC strategically becomes the capability of small business organisations, allowing small businesses to innovate and compete in a competitive and dynamic business environment. KMCs play a role in bringing up organisational resources and competencies needed to find new opportunities to survive (James, 2004).

Sambamurthy et al. (2003) identified two important processes in dynamic capability: capability building process and entrepreneurial action process. Grimm et al. (2006) stated that competitive advantage in the action-based dynamic model involves three series: resources, action and competitive advantage. On the basis of this view, the resource that acts as an input entrepreneurship strategy here is a capability-building process. The process of building capabilities in KBV is a combination of two variables: knowledge management infrastructure and knowledge management processes. Gold et al. (2001) asserted that the knowledge management infrastructure in organisations will not be a capability without the presence of knowledge management processes. At the capability-building process stage, they added the existence of an entrepreneurial orientation variable. This finding is related to those of Ferreira et al. (2007), who found that entrepreneurial orientation is an important resource and capability in small and medium-sized businesses. Jantunen et al. (2005), in their research on dynamic capabilities, found that entrepreneurial orientation serves to reconfigure the capabilities of entrepreneurial companies. The entrepreneurial action process is positioned as a strategic entrepreneurship process in the input, process and output of entrepreneurship strategy (Hitt et al., 2011).

Nguyen (2010) made the following conclusions. (1) The capability of the knowledge management system is a multi-dimensional variable consisting of social knowledge management infrastructure, technical knowledge management infrastructure and knowledge management processes. (2) Social knowledge management infrastructure correlates with technical knowledge management infrastructure. (3) Social and technical knowledge management infrastructure is not directly related to competitive advantage. This result is in contrast to Chuang (2004), who found that the knowledge management infrastructure is directly related to a competitive advantage when each infrastructure is tested for its effect on competitive advantage. Nguyen (2010) also found that with a dynamic capability approach, the knowledge management process mediates the relationship of knowledge management infrastructure with a competitive advantage.

Stambaugh *et al.* (2011) identified the role of entrepreneurial orientation, especially the dimension of competitive aggressiveness in improving a company's performance against competitors. Research shows that entrepreneurial orientation has a significant effect on competitive action. Academics (Lee & Chu, 2011; Liu *et al.*, 2011; Wingwon, 2012) recommended that additional research is needed on the relationship between entrepreneurial orientation with a competitive advantage because test results tend to show an indirect relationship. Figure 1 shows the model that will be tested in this study.

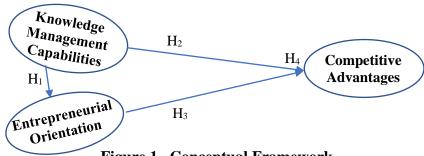


Figure 1. Conceptual Framework

Notes:

 H_1 = KMCs affect entrepreneurial orientation.

H₂= KMCs partially affect competitive advantage.

H₃= Entrepreneurial orientation partially affects competition.

H₄= KMC and entrepreneurial orientation simultaneously affect competitive advantage.

3. METHOD

This research uses explanatory survey methods with a quantitative approach to test the hypotheses. By following under the hypotheses, this study used inferential hypothesis testing/verification with structural equation modelling (SEM), arguing that this model is an integrated approach between confirmatory factor analysis (CFA), structural model and *path analysis*. This approach is in line with the views of Jöreskog and Sörbom (in Wijanto [2008]) who stated that by using SEM, researchers can obtain three benefits at once: (1) examination of the validity and reliability of the instrument (equivalent to CFA); (2) testing of relationships between latent variables (equivalent to path analysis) and (3) obtaining a model that is useful for prediction (equivalent regression analysis with structural *models*).

The variables studied are aerated into three variables. (1) **KMCs** are measured from the knowledge management infrastructure, including culture, leadership, benchmarking and technology; and knowledge management processes, including knowledge acquisition, knowledge sharing, knowledge application and knowledge acquisition. (2) **Entrepreneurial orientation** is the tendency of small businesses led by women entrepreneurs in Banten Province to be willing to innovate, be proactive, take risks, be aggressive and give autonomy to employees to exploit and explore opportunities in the market. (3) **Competitive advantages** refer to the uniqueness of small businesses because they can build knowledge management capabilities (KMCs) and carry out competitive actions to win competition and maintain business continuity in the market. Competitiveness is measured through efficient operating costs, product ability, product diversity, product availability, better management practices and low prices.

The sample size is determined according to the provisions of the number of samples required for SEM. The sample withdrawal method used is proportional simple random sampling (Cochran, 2010) in all small women entrepreneurs in Banten, which is a minimum sample.

The data were collected by surveying small businesses managed by women in Banten Province, Indonesia using instruments in the form of questionnaires. The data were analysed through partial least squares *SEM* (PLS-SEM) using Smart-PLS software, which is intended for determining the effect of independent variables on dependent variables. Table 1 shows the guidelines used for model assessment.

Table 1. Model Assessment Guidelines

Criterion	Explanation
FIT	Determining the percentage (%) of the model that can explain the variation of the data FIT >0.05
GFI (Goodness-of-fit index)	Range 0–1. If >0.09, then very good
SRMR (Standardised Root Mean Square Residuals)	Range 0–1. It is expected to be small or close to zero. <0.05 well-fitting model >0.08 acceptable

Source: Hooper et al. (2008)

4. RESULTS AND DISCUSSION

4.1. Interpretation Criteria Score Average

Descriptive statistical analysis was carried out by calculating the average (mean) score of the answers to each item in the research questionnaire. The research questionnaire distributed to respondents provided five possible answers (1 = 'strongly disagree'; 5 = 'strongly agree'). On the basis of respondents' answer, we calculated the average score range (Table 2).

Table 2 Interpretation Criteria Score

Score Interval	Category
1,00-1,80	Very low
>1,81-2,60	Low
>2,61-,340	Moderate
>3,61–4,20	High
>4,21–5,00	Very high

Source: Arikunto (2006)

4.2. Description of Research Variables

The KMC variable consists of two dimensions: the knowledge management infrastructure and the process of managing knowledge. The overall average KMC variable score obtained is **4.41**, which is categorised as very high according to the criteria for interpretation of the average score.

The entrepreneurial orientation variable consists of five questionnaire statement indicators. These indicators are coded as EO1, EO2, EO3, EO4 and EO5. The entrepreneurship orientation variable has an average score of **4.13**, which is categorised as high according to the interpretation criteria of the average score.

The competitive advantage variable consists of six questionnaire statement indicators. These indicators are coded as CA, CA2, CA3, CA4, CA5 and CA6. The competitive advantage variable has an average score of **3.98**, which is high according to the score interpretation criteria.

Tests with AVE values are more critical than composite reliability. The minimum recommended AVE value is 0.50. Table 2 shows the AVE output obtained from the PLS

algorithm report of SmartPLS 3.2.9. The AVE output obtained by each latent variable is greater than the value of 0.5, showing that each latent variable is valid.

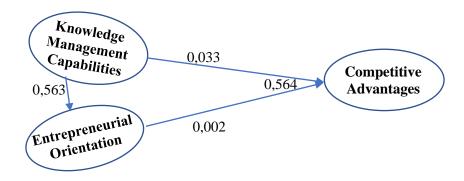
Table 3. Average Variance Extracted (AVE)

Variable	Average Variance Extracted (AVE)
Knowledge Management Capabilities	0.514
Entrepreneurial Orientation	0.566
Competitive Advantage	0.525

Source: Data processed using SmartPLS software (2021)

4.3. Relationship between Variables

Hypothesis testing in PLS-SEM is done by using a bootstrapping process that results in a calculated T value. If the T value is greater than the t-statistical value with a confidence level of 95% (1.96), then the hypothesis is significant.



Source: Smart PLS Output, (2021)

Figure 2. Research Model Bootstrapping Results

Notes:

 H_1 = KMCs affect entrepreneurial orientation.

 H_2 = KMCs partially affect competitive advantage.

H₃= Entrepreneurial orientation partially affects competition.

H₄= KMC and entrepreneurial orientation simultaneously affect competitive advantage.

According to the bootstrapping, the t-calculated value of the influence of the variable KMC on entrepreneurial orientation is 11.559, which is greater than the t-statistical value of 1.96. Thus, the variables of KMCs have a significant effect on entrepreneurial orientation variables. The t-calculated value of knowledge management capability against competitive advantage is 0.628, which is smaller than the t-statistical value of 1.96. Therefore, the KMC variable has a nonsignificant effect on the competitive advantage variable. The t-calculated value of entrepreneurial orientation towards competitive advantage is 0.032, which is smaller than the t-statistical value of 1.96. Thus, the entrepreneurial orientation variable has a nonsignificant effect on the competitive advantage variable.

Original Sample **Standard Deviation T Statistics** P **Hypothesis** Sample (O) (STDEV) (|O/STDEV|) Values Mean (M) \mathbf{H}_1 0.000 Knowledge 0.563 0.563 0.049 11.559 Management Capability **→**Entrepreneurial Orientation H_2 Knowledge 0.033 0.031 0.053 0.628 0.530 Management Capabilities → Competitive Advantage H_3 Entrepreneurial 0.002 0.000 0.061 0.032 0.974 Orientation **→** Competitive Advantage H_4 Knowledge 0.564 0.564 0.058 11.629 0.000 Management Capabilities and Entrepreneurial Orientation **→**

Table 4 Path Coefficient (Mean, STDEV, T-Values)

4.3 Effect of KMCs on Entrepreneurial Orientation

Competitive Advantage

The result of the path coefficient from PLS-SEM is that KMC has a significant effect on entrepreneurial orientation. The role of KMC is an entrepreneurial resource that allows companies to have the willingness to innovate, be proactive and take risks (Fang et al., 2009; Acikdilli & Ayhan, 2013). The results of this study are obtained by following previous entrepreneurial orientation research in small businesses which found that the success of small businesses in surviving in a competitive environment is attributed to the innovativeness, proactiveness and risk-taking of small businesses (Wiklund & Shepherd, 2003; Bouchard & Basso, 2011). Thus, the improvement of KMCs affects organisations' willingness to take entrepreneurial action. Wiklund et al. (2003) stated that companies with knowledge-based resources will have good performance if they have an entrepreneurial orientation. Moreover, according to Teece (2012), the current resource capability needs to be viewed as a resource in carrying out entrepreneurial action rather than as the creation of organisational routines.

4.4 Effect of KMCs on Competitive Advantage

The result of the path coefficient of PLS-SEM is that KMC has no significant effect on competitive advantage. The role of knowledge has become a crucial organisational resource. This change is due to the rapid development of information technology and changes in an increasingly competitive and interconnected environment that have shifted the strategic orientation of organisations from the use of physical resources to non-physical resources. Limited physical resources are easily imitated or substituted, but non-physical resources such as knowledge are difficult to replicate. Knowledge has become a strategic resource for developing organisational capabilities. Therefore, building KMCs can be a competitive

advantage for companies (Nguyen, 2010). However, the findings in the present study indicate that KMCs cannot be converted directly into a competitive advantage. Small businesses managed by entrepreneurial women must have business agility to achieve competitive advantage. Landaran et al. (2014) stated that agility in an organisation refers to 'the ability to respond quickly to market changes'. Thus, KMCs that are processed or responded to with good organisational agility will become a competitive advantage (Liu & Yang, 2020).

4.5 Effect of Entrepreneurial Orientation on Competitive Advantage

The result of the path coefficient of SEM PLS is that the influence of entrepreneurial orientation on competitive advantage was developed on basis of creation theory of entrepreneurial action (Alvarez & Barney, 2007). Researchers (Jiang, Liu, Fey, & Jiang, 2018; Li, Huang, & Tsai, 2009) indicated that entrepreneurial orientation is a resource that facilitates a company to surpass competitors. Li and Zhou (2010) stated that companies need an entrepreneurial orientation to achieve competitive advantage. The results of hypothesis testing show that entrepreneurial orientation had no significant effect on competitive advantage. The findings are supported by prior research (Hughes & Morgan, 2007; Rauch, Wiklund, Lumpkin, & Frese, 2009). Previous works suggested that entrepreneurial orientation relationships-with competitive advantages that are designed as indirect relationships need to be explored further to determine the variables that can mediate entrepreneurial orientation variable relationships with competitive advantages. The relationship of entrepreneurial orientation with competitive advantage follows previous studies (Rauch et al., 2009; Clausen & Madsen, 2011), which stated that such a relationship is rigid. The experts suggest that entrepreneurial orientation variables are not treated rigidly. This is in line with research (Lumpkin & Dess, 1996; Lumpkin & Dess, 2015; Miller, 2011) that stated that entrepreneurial decisions are a dynamic process within the company.

4.6 Effect of KMCs and Entrepreneurial Orientation on Competitive Advantage

KMC and EO simultaneously have a positive and significant effect on CA, although partially both KMC on CA and EO on CA have no significant effect. (1) The role of knowledge today has become an important organisational resource. This prominence is due to the rapid development of information technology as well as changes in an increasingly competitive and interconnected environment that shift the strategic orientation of organisations from the use of physical resources to non-physical resources. (2) Differences in physical resources have become less popular because they are limited and easy to imitate or substitute, whereas non-physical resources such as knowledge are the opposite. Knowledge has become a strategic resource for developing organisational capabilities. (3) Building KMC and entrepreneurial orientation is in line with competitive advantage developed on the basis of creation theory of entrepreneurial action.

Although the results of this study contradict those of Nguyen (2010), who concluded that building KMCs can be a competitive advantage for companies, the findings of this study indicate that KMCs partially cannot be converted directly into a competitive advantage. To achieve competitive advantage, a business must be agile (Landaran et al., 2014). Thus, the ability to respond quickly to market changes requires KMCs to process or respond with good organisational agility, which becomes a competitive advantage (Liu & Yang, 2020).

The results of this study suggest that entrepreneurial orientation has no significant effect on competitive advantage. This finding is relevant to the results of Rauch et al. (2009) and Clausen and Madsen (2011), who concluded that the relationship between entrepreneurial orientation and competitive advantage is strong. Nonetheless, they suggest that the entrepreneurial orientation variable should not be treated rigidly. The results of this study are

consistent with those of Lumpkin and Dess (1996), Lumpkin and Dess (2015) and Miller (2011), who stated that entrepreneurial decisions are a dynamic process within a company.

5. CONCLUSION

The research aims were investigated, and the following results were found. (1) KMCs partially have a positive and significant effect on entrepreneurial orientation. (2) KMCs partially have a positive but nonsignificant effect on competitive advantage. (3) Entrepreneurial orientation partially has a positive but nonsignificant effect on competitive advantage. (4) KMC and entrepreneurial orientation partially have a positive and significant effect on competitive advantage.

The following conclusions can be made. Firstly, the new knowledge of similar products that consumers are interested in, as a knowledge resource used by small businesses that are managed by women-to respond quickly to the market. Secondly, knowledge resources related to information opportunities in the market, are not quickly by the organisation so that it cannot achieve competitive advantages. This limitation is evident in several products that are marketed conventionally. In Industry 4.0, information technology must be used because conventional marketing cannot respond quickly to opportunities, thereby precluding competitive advantage.

Lastly, the development of technology affects the movement of the trend of changes in some products, such as fashion products, which are produced by small businesses led by women in Banten. This change encourages business actors to be adaptive and creative in creating products that meet the needs of the community

REFERENCES

- [1] Acikdilli, G., & Ayhan, D.Y. (2013). Dynamic Capabilities and entrepreneurial orientation in the new product Development: International Journal of Business and social science. Vol. 4 No. 11; September, 2013, pp. 121-141
- [2] Afendi, A.H., Abu-Talib, A.N., Farid, M.S. (2015) Entrepreneurial Orientation Effects on Market Orientation and SMEs Business Performance – A SEM Approach Rev. Integr. Bus. Econ. Res. Vol 4(3) 259-271
- [3] Alvarez, S. A., & Barney, J. B. (2007). The entrepreneurial theory of the firm. Journal of Management Studies, 44(7), 1057–1063.
- [4] Arikunto. S. 2006. *Prosedur Penelitian Suatu Pendekatan Praktek*. Jakarta . Published by Rineka Cipta.
- [5] Aziz, N. N. A., & Samad, S. (2016). Innovation and competitive advantage: moderating effects of firm age in foods manufacturing SMEs in Malaysia. *Procedia Economics and Finance*, 35(October 2015), 256–266.
- [6] Bari, A., & Arshad, D. (2019). Disentangling the significant of improvisational behavior on women entrepreneurs' business success. Journal of Technology and Operations Management, *14*(1), 1–7.
- [7] Basso, O and Bouchard, V. (2011) Exploring the links between Entrepreneurial Orientation and Intrapreneurship in SMEs. Journal of Small Business and Enterprise Development 18(2):219-231
- [8] Bressler, M. S. (2012). How small businesses master the art of competition through superior competitive advantage. Journal of Management and Marketing Research, 11(1), 2–9.
- [9] Bruno, G. (2017). Product knowledge management in small manufacturing enterprises. In Knowledge Management Initiatives and Strategies in Small and

- Medium Enterprises (pp. 157–179). IGI Global.
- [10] Chen, M.-J., & Miller, D. (2015). Reconceptualizing competitive dynamics: A multidimensional framework. Strategic Management Journal, 36(5), 758–775.
- [11] Clausen, T. H., & Madsen, E. L. (2011). Entrepreneurial orientation and firm performance: A dynamic perspective. Frontiers of Entrepreneurship Research, *31*(12), 1-13
- [12] Cochran, W.G. (2010) *Teknik Penarikan Sampel* (translated by Rudiansyah). Jakarta Universitas Indonesia Press.
- [13] Conner, K.R., and Prahalad, C.K.1996. 'A resource- based theory of the firm: Knowledge versusopportunism.' Organization Science, 7(5): 477-501.
- [14] Delgado-Verde, M., Martín-de Castro, G., & Navas-López, J. E. (2011). Organizational knowledge assets and innovation capability. Journal of Intellectual Capital, 12(1), 5–19.
- [15] Edvardsson, I. R., & Durst, S. (2013). The benefits of knowledge management in small and medium-sized enterprises. *Procedia Social and Behavioral Sciences*, 81, 351–354.
- [16] Egbu, C. (2006). Knowledge production and capabilities—their importance and challenges for construction organisations in China. Journal of Technology Management in China. 1(3):304-321
- [17] Ferreira, J., Paço A., Raposo, M. and Rodrigues, R. (2007). Entrepreneurship Education and Business Creation Propensity: Testing a Structural Model. Proceedings of IntEnt 2007 17th Global Conference, Internationalizing Entrepreneurship Education and Training, Gdansk, Poland.
- [18] Ghasemi, M., Nejad, M. G., & Aghaei, I. (2021). Knowledge management orientation and operational performance relationship in medical tourism (overview of the model performance in the COVID-19 pandemic and post-pandemic era). Health Services Management Research, 34(4):208-222
- [19] Gold, A.H., Malhotra, A., and Segars, A.H. 2001. "Knowledge Management: An Organizational Capabilities Perspective," Journal of Management Information Systems (18:1), pp. 185-214.
- [20] Grant, R.M. (1996), Toward a knowledge-based theory of the firm. Strategic Management Journal, Vol. 17 No. 4, pp. 109-22.
- [21] Grimm, M C., Hun Lee and Smith, K.G. (2006) Strategy as Action: Competitive Dynamics and Competitive Advantage. Oxford University Press. New York
- [22] Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2011). Strategic Management: Competitiveness and Globalization (9th ed.). Mason, OH: Thomson South-Western.
- [23] Hooper, D, Coughlan, J and Mullen, M (2008) Structural Equation Modelling: Guidelines for Determining Model Fit. Electronic Journal of Business Research Methods, 6(1), 53-60.
- [24] Hoskisson, R.E., Hitt, M.A., Wan, W.P. & Yiu, D. (1999). Theory and research in strategic management: Swings of a pendulum. Journal of Management, 25(3), 417-456
- [25] Hughes, M., & Morgan, R. E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. Industrial Marketing Management, *36*(5), 651–661.
- [26] James Ward and Aybüke Aurum (2004) Knowledge Management in Software Engineering Describing the Process. Conference: 15th Australian Software Engineering Conference (ASWEC 2004), 13-16 April 2004, Melbourne, Australia
- [27] Jantunen, A, Kaisu Puumalainen, Sami Saarenketo and Kalevi Kyläheiko (2005) Entrepreneurial Orientation, Dynamic Capabilities and International Performance.

- Journal of International Entrepreneurship 3(3):223-243
- [28] Jennings, P., & Beaver, G. (1997). The performance and competitive advantage of small firms: A management perspective. International Small Business Journal, 15(2), 63–75.
- [29] Jiang, X., Liu, H., Fey, C., & Jiang, F. (2018). Entrepreneurial orientation, network resource acquisition, and firm performance: A network approach. Journal of Business Research, 87, 46–57.
- [30] Kanapathipillai, K., & Azam, S. M. F. (2019). A Conceptual Understanding of the Critical Factors That Induce Women Entrepreneurial Success in the Klang Valley, Malaysia. European Journal of Management and Marketing Studies, *4*(2), 90–110. https://doi.org/10.5281/zenodo.3477629
- [31] Khan, S. Z., Yang, Q., & Waheed, A. (2019). Investment in intangible resources and capabilities spurs sustainable competitive advantage and firm performance. Corporate Social Responsibility and Environmental Management, 26(2), 285–295.
- [32] Landaran, S., Forghani, MH., Hamidi, V. & Dehaghi, MR. (2014) Studying the relationship between organizational learning & dimension of organizational agility: a case study-university of Isfahan. Journal of social issues & humanities, Vol. 2, Issue, pp 146-151
- [33] Li, J. J., & Zhou, K. Z. (2010). How foreign firms achieve competitive advantage in the Chinese emerging economy: Managerial ties and market orientation. Journal of Business Research, 63(8), 856–862.
- [34] Li, Y.-H., Huang, J.-W., & Tsai, M.-T. (2009). Entrepreneurial orientation and firm performance: The role of knowledge creation process. Industrial Marketing Management, 38(4), 440–449.
- [35] Lim, S., & Envick, B. R. (2013). Gender and entrepreneurial orientation: a multi-country study. International Entrepreneurship and Management Journal, 9(3), 465–482.
- [36] Liu, H.-M., & Yang, H.-F. (2020). Network resource meets organizational agility: Creating an idiosyncratic competitive advantage for SMEs. *Management Decision*.
- [37] Łuczka, T., & Małecka, J. (2018). Knowledge Management in Micro and Small Enterprises in Poland. European Conference on Knowledge Management, 476–XXII.
- [38] Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. Academy of Management Review.21(1): 135-172
- [39] Lumpkin, George Thomas, & Dess, G. G. (2015). Entrepreneurial orientation. *Wiley Encyclopedia of Management*, 1–4.
- [40] Mahmood, R., & Hanafi, N. (2013). Entrepreneurial orientation and business performance of women-owned small and medium enterprises in Malaysia: Competitive advantage as a mediator. International Journal of Business and Social Science, 4(1), 82–90.
- [41] Marques, C. S., Santos, G., Moreira, J., & Braga, A. (2018). The Effect of Women's Knowledge in a Footwear Firms' Internationalisation and Innovation. European Conference on Knowledge Management, 503–511.
- [42] Marr, B. and Schiuma, G. (2001), "Measuring and managing intellectual capital and knowledge assets in new economy organisations", in Bourne, M. (Ed.), Handbook of Performance Measurement, Gee, London.
- [43] Martinsons, M. G., Davison, R. M., & Huang, Q. (2017). Strategic knowledge management failures in small professional service firms in China. International Journal of Information Management, *37*(4), 327–338.
- [44] Nguyen, T. N. Q. (2010). Knowledge management capability and competitive

- advantage: an empirical study of Vietnamese enterprises. Southern Cross University.
- [45] Niu Fang, Zhang Yuli and Xue Hongzhi (2009). Acquisition of resources, formal organization and entrepreneurial orientation of new ventures. Journal of Chinese Entrepreneurship Vol. 1 No. 1, 2009, pp. 40-52
- [46] Nunes, M. B., Annansingh, F., Eaglestone, B., & Wakefield, R. (2006). Knowledge management issues in knowledge-intensive SMEs. Journal of Documentation. Vol 62 (1) pp. 101-119
- [47] O'Donnell, A., Gilmore, A., Carson, D., & Cummins, D. (2002). Competitive advantage in small to medium-sized enterprises. *Journal of Strategic Marketing*, 10(3), 205–223.
- [48] Octavia, A., Damayantie, N., Sriayudha, Y., & Ali, H. (2015). Women Entrepreneurship and Innovation Capability: Influence on Competitive Advantage of SMEs Batik Jambi.
- [49] Dinasti International Journal of Education Management and Social Science, 3(2), 221-232.
- [50] Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. Entrepreneurship Theory and Practice, 33(3), 761–787.
- [51] Roos, J., Roos, G., Dragonetti, N.C. and Edvinsson, L. (1997), Intellectual Capital: Navigating the New Business Landscape, Macmillan, London.
- [52] Rouse, M. J. and U. S. Daellenbach. 1999. Rethinking research methods for the resource-based perspective, Isolating sources of sustainable competitive advantage, Strategic Management Journal 20: 487-494.
- [53] Sambamurthy, V. Anandhi S. Bharadwaj, Varun Grover (2003) Shaping Agility Through Digital Options: Reconceptualizing the Role of Information Technology in Contemporary Firms. MIS Quarterly 27(2):237-263
- [54] Smith, M.K. (2001) Peter Senge and the learning organization. The Learning Organization. The Encyclopedia of Informal Education. http://www.infed.org/biblio/learning-organization.htm.
- [55] Sheikh, S. A. (2008). Use of new knowledge and knowledge management to gain competitive advantage. Communications of the IBIMA, 1(4), 34–41.
- [56] Shigang, Y. (2010). Competitive Strategy and Business Environment: The Case of Small Enterprises in China. *Asian Social Science*, *6*(11), 64-71
- [57] Shu-Hui Chuang (2004). A resource-based perspective on knowledge management capability and competitive advantage: an empirical investigation. Expert Systems with Applications, 27(3):459–465,
- [58] Stewart, T.A. (1997) Intellectual Capital: The New Wealth of Organizations. Doubleday/Currency, New York.
- [59] Stambaugh, J. E., Yu, A., & Dubinsky, A. J. (2011). Before the attack: A typology of strategies for competitive aggressiveness. Journal of Management Policy and Practice, 12(1), 49-6
- [60] Sveiby, Karl-Erik (2001). A Knowledge-based Theory of the Firm to guide Strategy Formulation, December 2001 Journal of Intellectual Capital 2(4):344-358
- [61] Teece, D. J. (2012). Dynamic capabilities: Routines versus entrepreneurial action. Journal of Management Studies, *49*(8), 1395–1401.
- [62] Tingko Lee, Wenyi Chu (2011). Entrepreneurial orientation and competitive advantage: The mediation of resource value and rareness. African Journal of Business Management Vol. 5(33), pp. 12797-12809
- [63] Tresna, P.W. and Raharja, S.J. (2019) Effect of Entrepreneurial Orientation, Product Innovation and Competitive Advantage on Business Performance in

- Creative Industries in Bandung City, Indonesia. Review of Integrative Business and Economics Research, Vol. 8 (s3), 51-60
- [64] Valkokari. K. and Helander, N. (2007) Knowledge management in different types of strategic SME networks, Management Research News 30(8):597-608
- [65] Vazquez-Avila, G., Sanchez-Gutierrez, J., & Rodriguez-Camacho, R. (2012). Impact of knowledge management and intellectual capital on competitiveness of SMEs manufacturing in the Western region of Mexico. Competition Forum, 10(1), 55-62
- [66] Wijanto, S. (2008) *Structural Equation Modeling Dengan Lisrel 8.8*, Published by Graha Ilmu, Yogyakarta
- [67] Wiklund, J. and Shepherd, D. (2003) Knowledge-Based Resources, Entrepreneurial Orientation, and the Performance of Small and Medium-Sized Businesses. Strategic Management Journal, 24, 1307-1314
- [68] Wingwon, B. (2012). Effects of Entrepreneurship, Organization Capability, Strategic Decision Making and Innovation toward the Competitive Advantage of SMEs Enterprises. Journal of Management and Sustainability, 2(1), 137–150.
- [69] Wong, K. Y. (2005). Critical success factors for implementing knowledge management in small and medium enterprises. Industrial Management & Data Systems. 105 (3): 261-279.
- [70] Wong, K. Y., & Aspinwall, E. (2004). Characterizing knowledge management in the small business environment. Journal of Knowledge Management. 8(3), pp. 44-61.
- [71] Yuan Li, Yi Liu, Heng Liu (2011) Co-opetition, distributor's entrepreneurial orientation and manufacturer's knowledge acquisition: Evidence from China. Journal of Operations Management Volume 29, Issues 1–2, pp 128-142
- [72] Zainol, N. R., & Al Mamun, A. (2018). Entrepreneurial competency, competitive advantage and performance of informal women micro-entrepreneurs in Kelantan, Malaysia. Journal of Enterprising Communities, *12*(3), 299–321.