Building innovation and competitiveness for low technology manufacturing SMEs through imitating capability and learning: The case of Indonesia

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Abstract: The aim of this paper is to examine relationships among organizational learning, imitating capability, innovation and competitiveness advantage in the small and medium enterprise (SME). Furthermore, the paper also examines the mediation effect of innovation in the relationship between organizational learning and imitating capability to competitiveness advantage. Using empirical data drawn from 200 SMEs managers in Indonesia, the data were analyzed using partial least squares variance-based structural equation modeling (PLS-SEM). Results indicate that that organizational learning and imitating capability were an important determinant of organizational innovation and competitive advantage. Innovation had a positive relationship with competitiveness and has a mediating role in the relationship between organizational learning and imitating capability to competitiveness advantage. The implication of this study is that SMEs can increase their competitiveness through learning and imitating strategies that are applied simultaneously. This research is original in that it deliberately focuses on learning and imitating capability in low-technology SMEs, especially in the Indonesian context.

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PUBLIC INTEREST STATEMENT

In line with the Indonesian government aspiration to transform its economy by fostering SMEs to compete in the ASEAN free market, this study to improve the knowledge of SME practitioners and government on SME competitiveness through organizational learning, imitating capability, and innovation. It is expected of this study to contribute a certain point of understanding among SME managers regarding how to improve innovation capabilities and competitiveness; particularly, to consider both learning and imitating capability as well as alternative strategies to maintain innovation and competitiveness for low technology manufacturing SMEs, especially in Indonesian context.
Through learning, imitating capability, and innovation, SMEs in Indonesia can maintain a competitive position in the ASEAN free market.

**Subjects:** Leadership; Regional Development; Sustainable Development; Development Policy; Economics and Development

**Keywords:** organizational learning; imitating capability; innovation; competitiveness advantage; SMEs

1. **Introduction**

The rapid technological change along with increasingly uncertain business and market globalization that occurred in the last decade has a great impact on the competitive business environment. Similar to large companies, small and medium-sized enterprises (SMEs) are compelled to continue to strengthen their capacity to face the free market. Market globalization and sharp competition have led to major changes in people's lives. Therefore, companies are required to adapt and apply the right strategies to successfully exploit business opportunities. SMEs competitiveness could increase their bargaining position in the business competition (Ada et al., 2013).

SMEs have been considered as an important component in the economic development of a country. For Indonesia, SMEs can be considered to have a strategic role in economic equality, fighting poverty and reducing unemployment. Therefore, the Indonesian government views the existence and growth of SME businesses. According to the Ministry of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia (2018), the number of SMEs in Indonesia is around 98% of the total business units and permeates 96% of the total workforce in the country. SMEs sector also is able to provide around 57% of goods and services needs, and its contribution to exports and national economic growth reaches 2–4% (Indonesian Bureau of Statistics, 2019). However, the potential of SMEs is often not brought to fruition because of common problems related to size, isolation, market opportunities, standards/quality, supply chains, logistics, and low technological innovation. To obtain a profit margin, small entrepreneurs in developing countries use innovation and imitating capability as strategies for their long-term growth (Zhou, 2006).

The low competitiveness of Indonesian SMEs is in line with the low export performance and is related to the low ability to compete in the domestic market. Indonesian SMEs products in the domestic market are still unable to compete with imported products, especially in terms of prices. According to Tambunan (2009), there are several reasons that cause low competitiveness of SMEs products: (1) the quality of goods made by SMEs is lower than imported goods or made by large businesses due to different aspects, including the lack of high technology and unskilled human resources (2) the level of efficiency in the production process is low as reflected by the relatively high production cost per one unit of output; and (3) macroeconomic policies in Indonesia, including trade regulations that have benefited from imported goods from SMEs, which in turn reduces stimulation for SMEs to improve the quality of their products, thereby reducing their competitiveness.

Most recently, studies have investigated in detail the importance of resources for SMEs competitiveness. Wu and Parkvithee (2017) found that the competitiveness of SMEs is related to external and internal factors. The external factors consist of market competition, legal and political conditions, and social and cultural environment including the language used to communicate with consumers. The internal factors are including brand management, marketing strategies, top management support, the effectiveness of deployment of human resources, and innovation are key factors, especially in the high-growth South-East Asia region (Anton et al., 2015). However, SMEs have a unique characteristic such as limited financial and human resources (Abdullah et al., 2010; Tambunan, 2009). This point indicates that resource-constrained SMEs, especially those that struggle with limited finance resources should concentrate on incremental innovation (Woschke et al., 2017), rather than radical innovations that are more often used by large companies (Freel,
Incremental innovations are product extensions with few changes and increase customer benefits. A recent study found that imitation strategy is positively related to incremental innovation (Wu et al., 2019), therefore, imitating capability is an alternative strategy needed to encourage SME’s innovation.

Mastery of technology can be done in several stages; (1) imitating capability, (2) improvement, and (3) innovation. However, there are limited studies to examine the imitating capability as predictor of innovation (Zhou, 2006). Both strategies are considered the choice of companies in product development, but companies can take a mixed form between two extremes on a continuum, from brand new innovation to pure imitating capability (Zhou, 2006). On the other hand, organizations need to develop learning strategies to support organizational innovation (Csath, 2012; Frank et al., 2012; K.Y. Wang et al., 2015; Kafetzopoulos & Psomas, 2016). Nevertheless, there is a limited study that is examined by a direct relationship of learning with SMEs competitiveness. Fraj et al. (2015) found that learning does not directly related to organizational competitiveness. Other findings such as by Vargas (2015) do not specifically use the construct of competitiveness, and focus on SME performance. Thus, this empirical evidence can provide new insights into theoretical models.

The present study is expected to advance the body of knowledge that examines the relationship of learning, imitating capability, innovation, and competitiveness in a single model. It also examines the mediating role of innovation in the relationship between organizational learning-competitiveness and imitating capability-competitiveness. First, the relationships between imitating capability, innovation and competitiveness are a limited examination (Naranjo-Valencia et al., 2011; Yamamura et al., 2005; Zhou, 2006). Although there have been many researches carried out on learning, imitating capability, innovation, and competitiveness, but limited studies are available to integrate all variables in a single model. Second, this study has considered organizational learning and imitating capability as the predictor for SMEs innovation and its impact on competitive advantage. Concurrently, this study also aims to investigate the mediating effect of innovation on the relationship between organizational learning-competitiveness and imitating capability-competitiveness. Examining these relationships in Indonesian context can enhance academicians’ understanding of the applicability of learning, imitating, innovation, and SMEs competitiveness in a developing country setting.

The innovation systems approach has received much attention from academics, but it still provides different assumptions on the determinants of innovation. Innovation systems have been adopted differently by country, regional, local, and in different sectors and technologies (Gabaldón-Estevan & Ybarra, 2017). In response to this heterogeneity, there is a considerable body of recent research devoted to understanding the innovation and competitiveness for low technology manufacturing SMEs through imitating capability and learning, especially in Indonesian context. Practically, in line with the Indonesian government aspiration to transform its economy by fostering SMEs to compete in the ASEAN free market, the study to improve the knowledge of SME practitioners and government on SME competitiveness through organizational learning, imitating capability, and innovation. It is expected of this study to contribute a certain point of understanding among SMEs managers regarding how to improve innovation capabilities and competitiveness; particularly, to consider both learning and imitating capability as well as alternative strategies to maintain innovation and competitiveness for low technology manufacturing SMEs in Indonesia.

2. Literature review
Innovation can be in the form of ideas, strategies, practices that companies run to develop products and services to the market before their competitors (Rogers, 2003). The Oslo Manual approach (OECD, 1991, 2010) is the body of literature most widely used by researchers to explain the concept of innovation that focuses its attention on the presence or absence of product/process innovations. As for the second body of literature, the term innovation embodies various concepts describing different characteristics, such as product and process innovation; radical and
incremental innovation; systemic and component innovation; and more recently closed and open innovation (Lee et al., 2010). The term innovation is also a type of new product development practices and innovation must serve as a basis for successful product development (e.g., Chesbrough, 2011). In this study, the focus on product innovations, as central role in SMEs (Hoffman et al., 1998).

Innovation capability is actually one of the most important dynamics that enables SMEs to achieve a high level of competitiveness advantages in the national, international (Saunila, 2016), create opportunities to access new markets, and a key variable in the enhancement of organizational performance (Jiménez-Jiménez & Sanz-Valle, 2011). Thus, promoting and improved innovation capability should be the key focus area of the top managers of SMEs (Çakar & Ertürk, 2010). There are numerous studies being conducted to explain the determinants of SMEs innovation, ranging from firm-specific characteristics such as learning (Csath, 2012; Gomes & Wojahn, 2017; K. Y. Wang et al., 2015; Kafetzopoulos & Psomas, 2016; Martinez-Costa et al., 2019; Valaei et al., 2017); imitation strategy (Wu et al., 2019; Zhou, 2006).

Companies that want to cultivate innovation capabilities need to establish routines and learning processes (Grant, 2016). There is a consensus in the literature that states a greater number of innovations as a result from learning process. The innovation requires that individuals acquire existing knowledge and that they share this knowledge within the organization (Jiménez-Jiménez & Sanz-Valle, 2011; Nonaka, 1994). In line with the above explanations, several empirical studies have demonstrated that organizational learning is positively associated with innovation. Using data from 500 Spanish SMEs, Martinez-Costa et al. (2019) found that organizational learning mediates the relationship between external collaboration—innovation. Valaei et al. (2017) surveyed 206 top managers of SMEs in Malaysia found that learning and related processes have connections to the innovation processes. The findings supported by Gomes and Wojahn (2017) showed that in the organizational learning capability influences the innovative performance of SMEs. Furthermore, Kafetzopoulos and Psomas (2016) confirmed that organizational learning capability favors the development of organizational innovation in the Greek context. In a different context, K.Y. Wang et al. (2015) state that organizational learning positively moderates the entrepreneurial orientation (EO)—innovation relationships. Csath (2012) concludes that innovation in SMEs can be more successful if supported by learning, knowledge creation and building of a learning culture. Thus, our first hypothesis is:

H1. Organizational learning will have a positive relationship with SMEs innovation

As a value, an innovation must be a tangible and useful product, process or work procedure. The essence of innovation is basically a structured knowledge formalized into a new work through technical discoveries in the field. Creating a value as a precondition for innovation requires a good and right organizational learning process. Organizational learning has an important role in innovation activities, supporting creativity, and able to create new ideas, and is the process of detecting and correcting errors (Argyris & Schon, 1978; Škerlavaj et al., 2010). However, innovation is not the only choice for a new product introduction, because there can be only one pioneer in any product market. Thus, imitating capability can be an alternative strategy that remains viable and more common strategy than innovation (Zhou, 2006).

Innovation and imitating capability strategies are both viable to improve the competitiveness in the global market. Imitating ability is company’s special competency and an initial stage process in mastering business model technology before reaching the next stage of improvement and innovation. For SMEs, imitating capability remains more common strategy (Zhou, 2006). Otuya (2018) in his study states that the imitating capability is an attempt by companies to borrow ideas from others and combine them with their creativity. It can be concluded that the imitating
capability can be useful for companies to make new products or services by taking an existing product and improving it (Shankar et al., 1998; Zhou, 2006). From the 1381 Chinese manufacturing firms in the period 2008–2014, Wu et al. (2019) study shows that imitation strategy is positively related to incremental innovation. Therefore, this study assumes that imitating capability can be used as an initial process to reduce barriers to technology and financial capital which are classic problems in SMEs. Thus, the hypothesis proposed is:

H2. Imitating capability will have a positive relationship with SMEs innovation.

According to Porter (1985), competitive advantage is a source of superior ability from the company. Competitive advantage develops from a value that can be created by a company for its consumers that exceeds the costs incurred by the company in creating it. Value is what consumers are willing to pay for. Superior value is formed by offering lower prices than competitors for comparable benefits or providing unique benefits that more than just balancing higher prices.

Theoretically, the higher the organizational learning ability, the higher the competitiveness of the company or product produced. However, there is a limited study that examines direct relationship of learning with SMEs competitiveness. Fraj et al. (2015) found that predictive learning does not directly predict organizational competitiveness. Other findings such as Vargas (2015) do not specifically use the construct of competitiveness and focus on SME performance. The relationship between learning and competitiveness is evidenced by longer studies such as Johannessen and Olsen (2009), Camison and Villar-López (2010) and Lopez et al. (2005) which state that there is a positive relationship between organizational learning and the competitiveness of SMEs. In consequence, we propose:

H3. Organizational learning will have a positive relationship with SMEs competitiveness

Imitating capability is the company’s special competency and an initial stage process in mastering business model technology before reaching the next stage of improvement and innovation. Kogut and Zander (1992) have shown that the ability to imitate has a positive effect on increasing the competitiveness of small industries. Other research from Dodgson et al. (2006) has shown that there is a positive influence from the imitating process on the ability to expand the company’s network (competitiveness). More recent studies by Otuya (2018) state that the imitating capability is an attempt by companies to borrowing ideas from others and combining that with their creativity. This strategy can build strong competitive advantages for businesses. Imitating capability can be more important than innovation, especially in the context of organizational development (Takácsné György & Toyserkani, 2014). Thus, the hypothesis proposed is:

H4. The imitating capability will have a positive relationship with SMEs competitiveness

Innovation has been trusted as the main component that plays an important role in the success of a company in obtaining a sustainable competitive advantage. The capacity for innovation is one of the important factors that have an impact on business performance (Lin et al., 2008). The relationship between innovation and competitiveness has broadly gained empirical support. Petrakis et al. (2015) conclude that anti-innovation culture hinders innovation and competitiveness if policymakers events improve macroconditions. Another study conducted by Kafetzopoulos et al. (2015) concludes that product and innovation processes have a direct impact on companies’ competitive advantage. Previous studies conducted by Rajas et al. (2013), Camisón and Villar-López (2010) also supports the notion that innovation has a positive and significant effect on competitiveness of companies. In addition, this study also examines the mediation effect of
innovation in relationship learning and imitating capability to competitiveness. Innovation will encourage improvements in SMEs business practices. Thus, it can enable a more rapid and efficient response to product and process innovation, which will have a positive impact on competitiveness. In consequence, we propose:

H5. Innovation will have a positive relationship with SMEs competitiveness

H6. The relationship between organizational learning and imitating capability to competitiveness is mediated by the innovation

3. Methodology

3.1. Sample and procedure
The data are obtained from questionnaire responses with the convenience sampling non-probability method to get the right number of respondents. The data is generated from 200 small and middle-sized industries at the Indonesia-Malaysia border region, namely Sambas, Singkawang, Pontianak, and Tanjung Balai.

3.2. Measurement
The organizational learning capability is measured using a scale consisting of three out of four initial scale indicators from Jerez-Gomez et al. (2005). The indicators include managerial commitment (three items), openness and experimentation (four items), and system thinking (four items). This scale was applied using a 5-point Likert Scale when 1 = strong disagreement and 5 = strong agreement. A principal component factor analysis (with varimax rotation) of the 11 items revealed two components explaining about 62% of the total variance. One item that had a < 0.05 loading factor was eliminated as recommended by Hair. et al. (2006). The final scale produces two factors, namely managerial commitment and empowerment (six items) and interaction with the external environment and openness (four items). Cronbach alpha for each component is equal to 0.85 and 0.84 (see Table 1).

3.2.1. Imitating capability
According to Bandura (1977), the indicators include four items, namely, level of complexity in imitating, the ability of the senses in imitating products, the ability of the senses in imitating actions, and the interest in imitating. Each item is rated on a five-point Likert scale ranging from strong disagreement (1) and strong agreement (5). A principal component factor analysis (with varimax rotation) of the six items revealed a single factor explaining about 77% of the total variance and thus supported the unidimensionality of the scale (Cronbach alpha = 0.91).

3.2.2. Innovation
Seven items were used to assess SMEs innovation in product and process adapted from Y. L. Wang et al. (2010). The items were applied using a five-Likert scale (1 = strong disagreement; 5 = strong agreement). The first step of principal components factor analysis eliminated 1 item (loading factor <0.50), and the six items revealed a single factor explaining about 68% of the total variance and thus supported the unidimensionality of the scale (Cronbach alpha = 0.90).

SMEs competitiveness uses marketing indicators adapted from Praude and Volvenkins (2011) including the unique features of products and services, variations of products and services, price/product value, competitive prices, business reputation, cost control, and customer experience. The seven items were rated on a five-point Likert scale (strong disagree = 1, strong agreement = 5). A principal component factor analysis of the seven items revealed two factors (feature = four items; price = three items) explaining about 71% of the total variance. Internal consistency Cronbach alpha = 0.87 and 0.75 so that it has adequate reliability (see Table 1).
3.3. Method of analysis

The first part of the analysis was designed to test the psychometric properties of the measures of all constructs. The second part of the analysis was designed to test the hypotheses using partial least squares structural equation modeling (PLS-SEM). PLS-SEM was adopted because of its advantages over covariance-based modeling (CB-SEM). PLS-SEM does not require normality data, capable to estimate the model with small sample size, and more appropriate where theory is less

| Construct/Dimension/Item               | Loading Factor | Cronbach Alpha | KMO  | Total Variance |
|----------------------------------------|----------------|----------------|------|----------------|
| Organizational learning                |                |                | 0.86 | 62%            |
| Managerial commitment and empowerment  |                | 0.85           |      |                |
| OL1                                    | 0.72           |                |      |                |
| OL2                                    | 0.70           |                |      |                |
| OL3                                    | 0.78           |                |      |                |
| OL4                                    | 0.75           |                |      |                |
| OL5                                    | 0.73           |                |      |                |
| Interaction and openness               |                | 0.84           |      |                |
| OL8                                    | 0.74           |                |      |                |
| OL9                                    | 0.80           |                |      |                |
| OL10                                   | 0.84           |                |      |                |
| OL11                                   | 0.78           |                |      |                |
| Imitating capability                   |                | 0.90           | 0.788| 77%            |
| IC1                                    | 0.82           |                |      |                |
| IC2                                    | 0.91           |                |      |                |
| IC3                                    | 0.88           |                |      |                |
| IC4                                    | 0.89           |                |      |                |
| Innovation                             |                | 0.90           | 0.90 | 68%            |
| INNO1                                  | 0.76           |                |      |                |
| INNO2                                  | 0.82           |                |      |                |
| INNO3                                  | 0.81           |                |      |                |
| INNO4                                  | 0.88           |                |      |                |
| INNO5                                  | 0.84           |                |      |                |
| INNO6                                  | 0.83           |                |      |                |
| Competitiveness                        |                | 0.84           |      | 71%            |
| Feature                                | 0.65           | 0.87           |      |                |
| CA1                                    | 0.86           |                |      |                |
| CA2                                    | 0.88           |                |      |                |
| CA3                                    | 0.87           |                |      |                |
| CA4                                    | 0.09           |                |      |                |
| Cost and price                         |                | 0.75           |      |                |
| CA5                                    | 0.81           |                |      |                |
| CA6                                    | 0.70           |                |      |                |
| CA7                                    | 0.83           |                |      |                |

Source: data processed
developed/exploratory research (J. F. Hair et al., 2011, 2014; Ringle et al., 2014). This study used PLS-SEM because of the lack of normality of data.

4. Results

4.1. Evaluation of measurement model (outer model)
Evaluation of the measurement was examined for internal consistency, construct validity (convergent validity and discriminant validity) as prescribed by J.F Hair et al. (2014). The first stage, internal consistency was evaluated using Cronbach’s α coefficient and construct reliability (CR). Cronbach’s alphas as indicator measure reliability for fist order measurement model were above 0.70 (OL = 0.71; IM = 0.90; INNO = 0.90; CA = 0.79). Furthermore, all composite reliability (CR) is above 0.70. Table 2 shows that all of these criteria exceed the required thresholds as recommended by J.F Hair et al. (2014) and Chin (2010).

Construct validity was assessed by examining convergent validity and discriminant validity. Convergent validity is assessed through factor loadings (λ) and average variance extracted (AVE). Fornell and Larcker (1981) recommend the cut-off value for AVE 0.50 and loading above 0.70. Table 2 support convergent validity of this model (Henseler et al., 2009). Discriminant validity recommended by Fornell & Larcker (1981) is comparing AVE with the correlation between latent variables. A have good discriminant validity if the square of the AVE > correlations among latent variables. Table 3 support convergent validity of this model (The square root of the AVEs are italic bold)

4.2. Evaluation of model’s fit and predictive capabilities
After the measurement model has been evaluated, the next step is evaluating the structural model as suggested by J.F Hair et al. (2014). Basic structural model metrics R² and Q² as initial evaluations, followed by path coefficients, and significance will be reported.

The R² of endogenous constructs provides the amount of variance that is explained by the model. Chin (2010) established the following threshold values for R²: 0.67 “substantial”; 0.33 “moderate” and 0.19 “weak” predictive values. Figure 1 shows that the R² of the endogenous constructs included in both models exceed the recommended minimum value. Figure 1 shows that R² values have moderate and substantial predictive power (innovation R² = 0.54; competitiveness R² = 0.74).

The Q² indicates predictive relevance. Evaluation of the model using blindfolding to obtain cross-validated redundancy measures for each construct. The Q2 values of larger than zero indicate that the exogenous constructs have predictive relevance for the endogenous construct (J. F. Hair et al., 2011). Figure 1 shows that Q² values of model are all above 0, indicating that both exogenous variables can be used as predictors.

Note: OL: organizational learning; IC: imitating capability; INNO: innovation; CA: competitiveness advantage; ** significant at 1% level of significance.

4.3. Hypothesis testing
Table 4 shows the structural model with the standardized coefficients for the research sample. The results provide sufficient support all hypotheses. Organizational learning (OL) is significantly and positively related to innovation, y1 = 0.50, p = 0.00 (H1 supported). Hypothesis 2, which states that imitating capability (IM) may be positively related to innovation is supported (y2 = 0.31 p-value = 0.00). The results demonstrate that the existence of organizational learning and imitating capability has positive effects on innovation for SMEs.

Hypothesis 3, which states that organizational learning may be positively related to competitiveness is supported (y3 = 0.37, p-value = 0.00). Hypothesis 4, which states that imitating capability may be positively related to competitiveness is supported (y4 = 0.36, p-value = 0.00).
Furthermore, hypothesis 5 which states that innovation may be positively related to competitiveness is supported ($\beta_1 = 0.25$, p-value $= 0.00$). These results indicate that organizational learning, imitating capability, and innovation was supported as predictors of competitiveness for SMEs. The results of the study also confirm the role of innovation to mediates the relationship of organizational learning—competitiveness and imitating capability—competitiveness (H6 supported).

5. Discussion

The present study investigated the impact of learning and imitating capability on innovation, and explored innovation's effect on competitiveness. Several conclusions can be drawn from the results of this research. The structural equation model is generally supported by data sample. First, the findings provide evidence that organizational learning and imitating capability has a positive effect on innovation. In this model, organizational learning is a dominant factor, fostering SMEs

| Table 2. Evaluation of the measurement model |
|---------------------------------------------|
|                                | Loading | Standard Deviation (STDEV) | T Statistics | Cronbach’s $\alpha$ | CR  | AVE  |
|---------------------------------------------|---------|---------------------------|--------------|---------------------|-----|------|
| OL                                         | 0.71    | 0.87                      | 0.77         |                     |     |      |
| Commitment                                 | 0.90    | 0.02                      | 56.25        |                     |     |      |
| Openness                                   | 0.86    | 0.03                      | 33.2         |                     |     |      |
| IC                                         | 0.90    | 0.93                      | 0.77         |                     |     |      |
| IC1                                        | 0.83    | 0.03                      | 23.76        |                     |     |      |
| IC2                                        | 0.91    | 0.02                      | 49.99        |                     |     |      |
| IC3                                        | 0.88    | 0.02                      | 40.11        |                     |     |      |
| IC4                                        | 0.9     | 0.02                      | 50.54        |                     |     |      |
| INNO                                       | 0.79    | 0.86                      | 0.76         |                     |     |      |
| INNO1                                      | 0.76    | 0.04                      | 19.33        |                     |     |      |
| INNO2                                      | 0.82    | 0.04                      | 20.2         |                     |     |      |
| INNO3                                      | 0.8     | 0.05                      | 16.58        |                     |     |      |
| INNO4                                      | 0.87    | 0.02                      | 44.1         |                     |     |      |
| INNO5                                      | 0.84    | 0.03                      | 28.41        |                     |     |      |
| INNO6                                      | 0.83    | 0.03                      | 28.14        |                     |     |      |
| CA                                         | 0.87    |                           |              |                     |     |      |
| Feature                                    | 0.89    | 0.01                      | 68.25        |                     |     |      |
| Price                                      | 0.85    | 0.02                      | 40.53        |                     |     |      |

Note: OL: organizational learning; IC: imitating capability; INNO: innovation; CA: competitiveness advantage. CR: composite reliability, AVE: average variance extracted

| Table 3. Discriminant validity: average variance extracted and construct correlations |
|---------------------------------------------|
|                                | CA       | IM       | INNO     | OL       |
| CA                             | 0.87     |          |          |          |
| IC                             | 0.76     | 0.88     |          |          |
| INNO                           | 0.73     | 0.63     | 0.82     |          |
| OL                             | 0.78     | 0.65     | 0.7      | 0.88     |

Note: OL: organizational learning; IC: imitating capability; INNO: innovation; CA: competitiveness advantage
innovation. This result is in contrast with the majority of the literature (Csath, 2012; Gomes & Wojahn, 2017; K.Y. Wang et al., 2015; Kafetzopoulos & Psomas, 2016; Martínez-Costa et al., 2019; Valaei et al., 2017). For low-tech SMEs such as sample data, managerial commitment, empowerment, and interaction with the external environment are the keys to successful learning. SMEs that have weaknesses in financial and HR capital must be able to take advantage of internal learning. This study also confirms the important role of imitating capability in SMEs innovation.

Second, the result provides evidence that learning, imitating capability, and innovation have a positive and significant relationship with the competitiveness of SMEs. Organizational learning is the dominant factor that influences competitiveness. There is a limited study that examined the direct relationship of learning with SMEs competitiveness. Fraj et al. (2015) found that learning orientation does not directly predict organizational competitiveness in the hospitality sector. Other findings such as Vargas (2015) do not specifically use the construct of competitiveness and focus on SME performance. Thus, this empirical evidence can provide new insights into theoretical models.

Supporting the proposed hypothesis, imitating capability proved to have a positive effect on the competitiveness of SMEs. Competitiveness can be maintained by developing imitating capability strategies as a way to overcome various technological limitations and costs of developing new products. It can be stated that imitating capability can provide the benefit of new innovation. Otuya (2018) in his study states that the imitating capability is an attempt by companies to borrow ideas from others and combining that with their creativity. This strategy can build strong competitive advantages for businesses. Thus, imitating capability can be more important than innovation, especially in the context of organizational development (Zhou, 2006).

This study has also demonstrated that innovation mediates the relationship between organizational learning and imitating capability to competitiveness. Supporting Anton et al. (2015), the determinant competitiveness of SME in Indonesia includes the levels of innovation, entrepreneurship, human capital, financial resources, market potential, and business strategy. This study adds to the latest empirical evidence regarding the interrelationship of innovation and competitiveness of SMEs sector in Indonesia.

6. Conclusion and future recommendations
This research study describes a structural model for examining relationships among antecedent factors of SMEs innovation (organizational learning and imitating capability). Furthermore, the research also examines the mediation effect of innovation in relationship organizational learning and imitating capability to competitiveness advantage. The findings provide support for these relationships. In particular, the empirical data shows that organizational learning and imitating capability of SMEs positively related to both innovation and competitiveness. Furthermore, organizational learning is a dominant factor that influences innovation and competitiveness.
Table 4. Structural model results

| Path          | Standardized coefficients | STDEV | t-value | p-value | Result   |
|---------------|---------------------------|-------|---------|---------|----------|
| OL -> INNO (γ1) | 0.50                      | 0.06  | 8.15    | 0.00    | supported|
| IC -> INNO (γ2) | 0.31                      | 0.08  | 4.07    | 0.00    | supported|
| OL -> CA (γ3)  | 0.37                      | 0.07  | 5.69    | 0.00    | supported|
| IC -> CA (γ4)  | 0.36                      | 0.06  | 5.79    | 0.00    | supported|
| INNO -> CA (β) | 0.25                      | 0.07  | 3.44    | 0.00    | supported|
| IC -> INNO -> CA | 0.08                    | 0.03  | 2.69    | 0.01    | supported|
| OL -> INNO -> CA | 0.12                    | 0.04  | 3.04    | 0.00    | supported|

Note: OL: organizational learning; IC: imitating capability; INNO: innovation; CA: competitiveness advantage

Since the relationship between learning, imitating capability, innovation, and SMEs competitiveness has been less discussed (Naranjo-Valencia et al., 2011; Yamamura et al., 2005; Zhou, 2006), the present study fills the indicated research gap. It integrates learning strategy, imitating capability, innovation, and competitiveness in a single model, which is a relatively unique attempt. Imitating capability can be used as an initial step for SMEs to innovate. The process of imitating capability and supported learning will create product innovation by making modifications to provide special differences with previous products. This relationship suggests that SMEs are best served by the simultaneous pursuit of both learning and imitating capability as strategies to increase competitiveness.

Innovation appeared to be the important mediator for the relationship learning, imitating capability and SMEs competitiveness. This contributes to the competitiveness literature by showing that there are important intervening processes that account for the learning-competitiveness relationship (Carrison & Villar-Lopez, 2011; Fraj et al., 2015; Lopez et al., 2005; Johannessen & Olsen, 2009; Vargas, 2015), and imitating capability—competitiveness relationship (Tokácsné György & Toyserkani, 2014; Kogut & Zander, 1992; Otuya, 2018). In this study, the relationship between learning-competitiveness and imitating capability—competitiveness is even partial mediated by innovation, suggesting that SMEs competitiveness performance is a more distal consequence of learning and imitating capability.

The practical implications for managers are as follows: first, management must be aware that competitiveness can be maintained if the company has learning capabilities by maintaining managerial commitment, empowering the employees, and continuing to interact with the external environment, and opening up to internal and external suggestions and criticisms. Second, the manager has to understand that imitating capability can have a positive effect on innovation and competitiveness. Imitating capability is only the first step as an alternative to the limitation of research and development, HR, and financial capital to develop new products. Using excessive imitating strategies can have an impact on the legal aspects of copyright. Therefore, managers need to apply to imitate strategies carefully while adding features that are different from the previous product.

The limitations of the study include three aspects. First, the sample size of this study is limited and the data collecting methods use a cross-sectional design. Thus, the interpretation of generalization and causality between the variables should be treated with caution. Second, the study is about SMEs in Indonesia only, which is location-specific. Finally, the measurement model in this study was adapted from the previous study. However, that has reduced the number of factors or items based on structure validity at the initial stage of the study.
In line with the limitations stated above, three directions for future research are suggested. First, more empirical studies with a larger sample size with longitudinal data collecting will be useful to enrich the current findings. Second, similar studies for SMEs beyond Indonesia will be fruitful, given the different demographics, social-cultural, and government policy factors in different countries that may affect the research result. Third, future research needs to re-examine the organizational learning measurement model which in this study is slightly different from the previous scale.

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