Market Sensing Capability and SMEs Performance: The Mediating Role of Product Innovativeness Success

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The purposes of this study are: (1) to test the effect of market sensing capability on SMEs performance, both directly and indirectly (product innovativeness success as intervening variable); (2) to test the effect of entrepreneurial orientation on SMEs performance, both directly and indirectly (product innovativeness success as intervening variable); (3) to test the effect of market sensing capability on speed to market; and (4) to test the effect of speed to market on SMEs performance. This research sampled 168 SME owners or managers. This study uses Structural Equation Model to test the hypothesis and uses AMOS 21 in data analysis. The result of this study shows that entrepreneurial orientation and product innovativeness have positive and significant effect on SMEs performance but market sensing capability and speed to market have no significant effect. Market sensing capability has significant effect on speed to market and product innovativeness success but entrepreneurial orientation has no significant effect on product innovativeness success. Product innovation success becomes the best mediating variable of market sensing capability on SMEs performance than entrepreneurial orientation on SMEs performance. The findings of this study provide two contributions to the entrepreneurship research. First, in the leather and furniture industry, the most important factor in achieving performance of SMEs is product innovation success. Second, entrepreneurial orientation is still predictive in improving performance.

JEL Classifications: L25, L26

Keywords: Market Sensing Capability, Speed to Market, Product Innovativeness Success, Entrepreneurial Orientation, SMEs Performance

Small Business Enterprises (SMEs) are one of the main pillars of economic growth in the developing countries (Setyaningsih, 2012), especially Indonesia (Dejardin, 2000). In Indonesia, the number of SMEs until 2011 has reached approximately 52 million. SMEs in Indonesia are very important to the economy because they account for 60% of GDP and 97% of employment. However, access to financial institutions is limited only to 25% or 13 million SMEs. The Indonesian government developed the SME through cooperatives in each province
or district/city. In Indonesia, SMEs have an important role of creating jobs in the surrounding society. SMEs in Indonesia are into trading, textile, processed food, furniture, leather sectors, and so forth.

Entrepreneurial orientation is not a new research topic. Entrepreneurial orientation explains the mindset of a company in motivating new business that gives useful framework to understand the entrepreneurial activity (Lumpkin & Dess, 2001). Generally, in the research of entrepreneurial orientation and SMEs performance, there is a gap found in the results. Some studies explained that entrepreneurial orientation has positive and significant effect on the SMEs performance (Anderson & Eshima, 2013; Arif, Thoyib, Sudiro, & Rohman, 2013; Li, Huang, & Tsai, 2009; Wiklund & Shepherd, 2003). However, there are also some other studies explaining that entrepreneurial orientation has no significant effect on SMEs performance (Baker & Sinkula, 2009; Sciascia, D’Oria, Bruni, & Larraneta, 2014; Slater & Narver, 2000).

Market sensing is an important part of business success. If SMEs can sense the condition of the market environment well, they will be capable of seeing the market needs, market trend, and business environment change. The ability of SMEs in sensing market conditions will improve company performance (Baker & Sinkula, 2009; Sciascia, D’Oria, Bruni, & Larraneta, 2014; Slater & Narver, 2000). However, there are also studies explaining that market sensing has negative effect on performance (Olavarrieta & Friedmann, 2008). Several studies explained that market sensing is not a driving factor that directly affects the performance of SMEs, particularly leathers and furniture ventures. Tarnovskaya, Elg, and Burt (2008) explained that in Moscow, sensing activities affect the market price more than the performance of SMEs (in the case of IKEA product). Furniture industry in Indonesia is undergoing agglomeration. Agglomeration tends to be based on an enterprise that has comparatively low barriers to entry (Perry & Tambunan, 2009). Agglomeration is dangerous because competitors enter the market. This will make the competition strictly high. The focal point in sensing is to sense a competitor. With more competition, the company will focus more on price-based competition. Price-based competition will reduce profit, thereby decreasing the performance of SMEs.

Johne (1999) stated that we must understand what our consumers think and consider innovation. Innovation will make new ventures successful (Ireland & Webb, 2007) and will enhance SMEs’ performance, especially in the furniture industry (Otero-Neira, Lindman, & Fernandez, 2009). However, it is not easy to gain innovation for SMEs. SMEs must understand the product, consumer perception (Fang et al., 2014; Gofman, Moskowitz, & Mets, 2009), competitor, process (Hooley, Broderick, & Moller, 1998; Leavy, 2005), and environment business change (Fang et al., 2014; Overby, Bharadwaj, & Sambamurthy, 2006; Setia, Sambamurthy, & Closs, 2008). SMEs must also have some capability on market sensing (Barringer & Bluedorn, 1999; Day, 1994, 2002; Fang et al., 2014; Foley & Fahy, 2004; Lankinen, Rökmän, & Tuominen, 2007), market knowledge (Day, 2002; Fiol & Lyles, 1985), market response (Homburg, Grozdanovic, & Klarmann, 2007; Jaworski & Kohli, 1993), and taking action on market information (Kohli, Jaworski, & Kumar, 1993; Neill, McKee, & Rose, 2007). Those capabilities will make superior SMEs performance.

The aims of this research are as follows:

- To test the effect of market sensing capability on SMEs performance, both directly and indirectly (product innovativeness success as intervening variable).
- To test the effect of entrepreneurial orientation on SMEs performance,
both directly and indirectly (product innovativeness success as intervening variable).

- To test the effect of market sensing capability on speed to market.
- To test the effect of speed to market on SMEs performance.

LITERATURE REVIEW

Market Sensing Capability

Some researchers concluded that market sensing capability is a process of knowledge generalization about the market, wherein information is used into enterprises’ decision-making (Day, 1994; Lankinen et al., 2007; Olavarrieta & Friedmann, 2008). Sensing capability enables the enterprises to monitor market continuously, to find market opportunity accurately, and also to understand about market threat (Fang et al., 2014). SMEs that have this capability will communicate, interpret, and analyze many information and behavior of anticipating environmental change better than before (Neill et al., 2007).

Market sensing capability is an important part of learning process about consumer, competitors, and others parties in the business environment (Day, 2002; Olavarrieta & Friedmann, 2008). Olavarrieta and Friedmann (2008) noticed that substantive facet in market sensing include: (1) defining the market (identifying specific needs and segments); (2) monitoring competition (analysis of competitors and performance measurement); (3) assessing customer value (methods of assessing value and construction of value models); and (4) gaining customer feedback (assessing customer satisfaction, perceptions of return on quality, and other forms of input from various stakeholders). Day (2002) divided market sensing into three activities: sensing activities, interpreting activities of any information that are found from sensing activities, and evaluating activities.

Market sensing is different from market research. Piercy (2008) explained that market sensing describes organization process on enhancing understanding about external environment generally. Market sensing is not data collecting or data interpretation activities (Cravens, Piercy, & Baldauf, 2009). Market research tends to focus on data collecting and reporting technique (survey, observation, market experiment, etc.).

Speed to Market

Birnbaum-More (1993) defined speed to market as the degree when a new product is introduced to the market faster than its competitors. Based on literatures, indication of speed to market happens if a new product is developed and launched faster than its competitors, complete before normal (particular) time, and launched to market as planned (Akgun & Lynn, 2002; Zhang & Wu, 2013).

Various literatures explain about the important factors of speed to market concept. Eisenhardt (1989) investigated speed of making decision in the uncertain business environment. Eisenhardt (1989) found that using real-time information, considering alternatives in the same time, hiring experienced counselors, employing active conflict resolution, and increase integration between managerial decisions are part of speed of market concept. Kessler and Chakrabarti (1996) researched about speed of new product development, wherein they also found some important factors such as having time objective, executing project continuously, and decreasing testing time.

Product Innovativeness Success

This research focuses on two kinds of product innovativeness success: first, definition of product
innovativeness success. Garcia and Calantone (2002) defined innovativeness as the degree of “newness” of an innovation, whether newness to the world, to the industry/market, or to the firm. As Bao, Sheng, and Zhou (2012) have done, this research is more focused on product innovativeness at market level. Reasons of innovativeness at market level are based on the following: (1) new product success is measured from market deals, (2) renewing evaluation directs to special factor change within enterprise which is motivated by new product, and (3) product innovativeness concept is seen from consumer perspective (Bao et al., 2012).

Second focus is the difference between product innovation and process innovation. Product innovation is product development or new service to gain market needs (Damanpour & Gopalakrishna, 2001), whereas process innovation is new production process through new tools or reengineering of operational process (Wong & He, 2003). This research is focused more on product innovation.

**Entrepreneurial Orientation**

Entrepreneurial orientation has become an essential concept in the domain of entrepreneurship that has received a considerable amount of theoretical and empirical attention (Covin, Green, & Slevin, 2006). Entrepreneurial orientation is defined as the processes, structures, and behaviors of firms that are characterized by innovativeness, proactiveness, and risk taking (Covin & Slevin, 1989). According to Lumpkin and Dess (1996), entrepreneurial orientation refers to the processes, practices, and decision-making activities that lead to new entry. They considered entrepreneurial orientation as a process construct, which is concerned with the methods, practices, and decision-making styles used by the managers. Lumpkin and Dess (1996) added two dimensions of entrepreneurial orientation, which are “autonomy” and “competitive aggressiveness”.

Wiklund (1999) agreed that entrepreneurial orientation is a combination of three dimensions:

<table>
<thead>
<tr>
<th>Source</th>
<th>SME Performance Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omerzel and Antoncic (2008)</td>
<td>Profit and growth</td>
</tr>
<tr>
<td>Minchna (2009)</td>
<td>Net sales revenue and gross profit</td>
</tr>
<tr>
<td>Zheng, O’Neill, and Morrison (2009)</td>
<td>Increased sales, increased market shares, and growth potential</td>
</tr>
<tr>
<td>Bakar, Sulaiman, and Osman (2014)</td>
<td>Financial profitability, enterprise growth, and satisfaction</td>
</tr>
<tr>
<td>Sok, O’Cass, and Sok (2013)</td>
<td>Profitability, return on investment (ROI), reaching financial goal</td>
</tr>
<tr>
<td>Nedzinskas, Pundziene, Bouziute-Rafabaviciene, and Pilkiene (2013)</td>
<td>Relative finance and relative non-finance</td>
</tr>
<tr>
<td>Naude, Zaefarian, Tavani, Neghabi, and Zaefarian (2014)</td>
<td>Top management’s satisfaction with overall performance last year, overall performance relative to major competitors last year, overall performance of the last year</td>
</tr>
<tr>
<td>Carey (2015)</td>
<td>Market share, new product/service development, revenue growth, market development, cost control, cash flow, profit</td>
</tr>
</tbody>
</table>
innovativeness, proactive, and risk taking. Innovativeness is an attitude reflecting the tendency to give support and being involved in rising new ideas, creative process, and divergence toward practice and provided technology (Lumpkin & Dess, 1996). Proactive means the tendency of someone or company to be active in seeking the opportunity, showing initiative, taking action, and trying in order that change can be made. Someone seeking the opportunity will show the behavior pattern covering the effort of problems study, mind superiority, and determining strategic way of having a target directing capability. Taking risk means seeing the advantage in projects that have a great opportunity to fail (Lumpkin & Dess, 1996).

**SMEs Performance**

Performance is success measurement of company success level in reaching its goal. Success level can be seen from the financial performance, marketing, operational performance, and human resource performance.

Good performance will increase the stakeholders’ prosperity. Business performance is also related to the performance of several functions functioning well in a company. I define SMEs performance as SMEs success in reaching profitability and growth level according to what has been set. SME performance measurement is almost the same as company performance generally. Table 1 lists researches that explain SME performance indicators.

**Research Model and Hypothesis Development**

This research investigates the relationship among market sensing capability, speed to market, product innovation success, entrepreneurial orientation and SMEs performance. This research also wants to investigate product innovation success as intervening variable between market sensing capability-SMEs Performance and Entrepreneurial Orientation-SMEs Performance. Figure 1 shows the relationship:

*Figure 1. Empirical model*
Market Sensing Capability and Product Innovativeness Success

Market sensing capability is capability owned by SMEs to observe the market condition and surrounding environment. In that process, SMEs conduct observation to the need and trend existing in the market. From that observation, SMEs will be able to follow the tendency of innovation wanted by the market. SMEs who have sensing capability will increase their product innovativeness (Zhang & Wu, 2013).

Market sensing relates with learning process, which Day (2002) believed is based on three activities of sensing, interpreting any information found from sensing activities, and evaluating. An enterprise that learns about its environment will be more innovative (Calantone, Cavusgil, & Zahao, 2002; Keskin, 2006). Those searching activity will motivate enterprise to use and try to combine knowledge and latest information to develop new product enhancement (Laursen & Salter, 2006). First hypothesis of this research is:

H1: Market sensing capability has positive and significant effect on product innovativeness success.

Market Sensing Capability and SMEs Performance

Grewal and Slotegraaf (2007) and Amit and Schoemaker (1993) explained capability empirically as effects on performance. One kind of those capabilities is market-sensing capability. Many literatures stated that sensing capability is part of learning (Day, 2002) or knowledge-related resources (Olavarrieta & Friedmann, 2008; Olavarrieta & Roberto, 1999). Organizational learning is new knowledge development or new perspective and its determination on enterprise behavior (Olavarrieta & Friedmann, 2008). Organization learning process is explained as enterprise capability to sense market, absorb new information, distribute, and interpret it (Day, 1994; Day & Nedungadi, 1994). Those organizational learning is similar with market sensing process. Learning capability or market sensing can increase superior performance (Day, 1994, 2002; Tseng & Lee, 2014; Vorhies & Morgan, 2005). The second hypothesis of this research is:

H2: Market sensing capability has positive and significant effect on SMEs performance.

Market Sensing Capability and Speed to Market

SMEs that are capable of sensing the market will understand market needs and wants. Understanding will make the enterprise tend to gain those market needs and wants. If there is demand change, the enterprise will respond faster to those changes and provide market needs with suitable product or service. In other words, the capability to sense the market will affect enterprise speed in reacting to consumer needs and wants. Under this perspective, the more innovative firms are those that are more: timely, creative, prolific in the introduction of new products or services, and quicker in modifying existing offerings to provide superior benefits to their customers (Moorman, Deshpande, & Zaltman, 1993). The third hypothesis of this research is:

H3: Market sensing capability has positive and significant effect on speed to market.

Speed to Market and SMEs Performance

Competition based on speed is important on business (Wang & Wang, 2012). In recent years, many enterprises launch product, service, and process rapidly. This occurrence in Indonesia shows that consumers are waiting for those new products. Tidd, Bessant, and Pavitt (2005)
explained that if an enterprise can respond on new product cheaply and quickly, it will increase its performance. Any enterprise that has fast response on consumer needs increases its performance (Homburg et al., 2007; Jaworski & Kohli, 1993; Wei, Samiee, & Lee, 2014). The fourth hypothesis of this research is:

H4: Speed to market has positive and significant effect on SMEs performance.

Entrepreneurial Orientation - Product Innovativeness Success

An enterprise has entrepreneurial orientation if it has innovative ideas, dare to take a risk, and proactive to get innovation. The more fresh and innovative the ideas are, the more an enterprise can develop new prototype product and finally effect product success. More so, if this enterprise is brave enough to take a risk and proactive to develop ideas, then it will be able to meet consumer needs for something new. Brave to take a risk indicates that the enterprise is also brave to develop new product. The more an enterprise does trial and error, there will be more possibility to develop new product. Thus, entrepreneurial orientation will increase product innovation success (Avlonitis & Salavou, 2007). The fifth hypothesis of this research is:

H5: Entrepreneurial orientation has positive and significant effect on product innovativeness success.

Entrepreneurial Orientation and SMEs Performance

A company having entrepreneurial orientation has the ability to find and to exploit new market (Barringer & Bluedorn, 1999; Wiklund & Shepherd, 2003) and it responds to the challenge to develop in competitive environment (Lumpkin & Dess, 1996; Shane & Venkataraman, 2000). It happens because entrepreneurial orientation includes the desire to innovate, to seek risk, to take independent action, and to become more proactive and aggressive than the competitor towards new market opportunity (Lumpkin & Dess, 1996; Wiklund & Shepherd, 2005).

SMEs get benefit by adopting entrepreneurial orientation. An enterprise that adopts entrepreneurial orientation increases its business performance (Wiklund & Shepherd, 2003). Many researches show that entrepreneurial orientation can increase performance (Covin & Slevin, 1989; Frank, Kessler, & Fink, 2010; Li et al., 2009; Lumpkin & Dess, 1996; Naldi, Nordqvist, Sjoberg, & Wiklund, 2007; Wiklund & Shepherd, 2005). The sixth hypothesis of this research is:

H6: Entrepreneurial orientation has positive and significant effect on SMEs performance.

Product Innovativeness Success-SMEs Performance

In most industries, the successful development and commercialization of a new product are essential determinants of sustained competitive advantage of the firms (Mu, Peng, & Tan, 2007). The positive role of firm innovativeness on firm performance has been supported by many theoretical and empirical studies of new product developments, technology adoption and diffusion, process improvement, and innovation (Calantone et al., 2002). Atuahene-Gima (1996) provided empirical evidence of the positive association between innovativeness, market success, and project impact performance. Many studies found that innovation has significant effect on firm performance (Akgun, Keskin, & Byrne, 2009; Keskin, 2006; Koellinger, 2008; Mansury & Love, 2008; Olavarrieta & Friedmann, 2008; Wang & Wang, 2012) and firm profitability (Calantone et al., 2002). The seventh hypothesis of this research is:
H7: Product innovativeness success has positive and significant effect on SMEs Performance.

Product Innovation Success as Mediating Variable Between Market Sensing Capability on SMEs Performance

Previous studies explained that there is a direct relationship between market sensing capability on performance (Fang et al., 2014; Lindblom et al., 2008; Tseng & Lee, 2014). However, the evidence is not fully consistent. There are studies that explained the negative impact between market sensing capability on performance (Olavarrieta & Friedmann, 2008). The relationship between the market sensing capability may be mediated by product innovation success. The logic is that if an SME is able to understand what is needed in the market, it will cause the company to create a market-driven product innovation. If successful product innovation is accepted by the market, the performance definitely improves. The eighth hypothesis of this research is:

H8: Market sensing capability will positively lead SMEs performance via product innovativeness success

Product Innovativeness Success as Mediator Between Entrepreneurial Orientation and SMEs Performance

Previous studies explained that there is a direct relationship between entrepreneurial orientation on performance (Anderson & Eshima, 2013; Arif et al., 2013; Li et al., 2009; Wiklund & Shepherd, 2003). However, there are also some other research explaining that entrepreneurial orientation has no significant effect on SME performance (Baker & Sinkula, 2009; Sciascia et al., 2014; Slater & Narver, 2000). The research gap makes this study look for alternative variables that can explain the indirect effect between entrepreneurial orientation and performance of SMEs. Avlonitis and Salavou (2007) described the influence of entrepreneurial orientation on performance of SMEs that are mediated by the product innovativeness. The ninth hypothesis of this research is:

H9: Entrepreneurial Orientation will positively lead SMEs performance via product innovativeness success

RESEARCH METHOD

Research Design

Research design is a plan that is structured in such a way that the investigation is able to obtain answers to research questions (Cooper & Schindler, 2006). Sekaran (2003) explained that there are four types of research, namely, exploratory, description, hypothesis testing, and case study. This study uses the hypothesis testing.

Sample and Sampling Technique

In 2014, Indonesian SMEs in the leather and furniture industries are about 31,952 (data reprocessed from Indonesia Central Bureau of Statistics [www.bps.go.id]). The amount represents the population in this study. Sample that will be taken in this study is between 100-200, because according Hair, Black, Babin, and Anderson (2010), sample of 100-200 already fulfills the requirements for analysis by using SEM.

Sampling technique is based on a non-probability sampling, which is purposive sampling. There are several criteria in selecting the sample in this study: (1) research area is only in five cities in Indonesia, which are Solo, Sukoharjo, Jepara, Klaten, and Magetan, (2) SME having 10 employees, and (3) SME has operated for more than three years.
To obtain the data, this study spread 250 questionnaires to the owners or managers of SMEs (leather and furniture industries) in Solo, Sukoharjo, Klaten, Jepara, and Magetan. The questionnaires that were returned to be processed into the next stage reached 168 questionnaires (67.2%). From 168 respondents in this research, 125 are males and 43 respondents are females. Most of (72.02%) the respondents have bachelor’s degree. The age of SMEs varies enough. Most of the SMEs are operating between three years until seven years and have revenue under 50 million rupiahs per month. Table 2 shows the characteristics of respondents in this research.

### Table 2. Respondent Characteristic

<table>
<thead>
<tr>
<th>Respondent Characteristic</th>
<th>Number of Observations</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>125</td>
<td>74.40%</td>
</tr>
<tr>
<td>Female</td>
<td>43</td>
<td>25.60%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>121</td>
<td>72.02%</td>
</tr>
<tr>
<td>Master degree</td>
<td>35</td>
<td>20.83%</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>12</td>
<td>7.14%</td>
</tr>
<tr>
<td>Establishment length</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 – 7 years</td>
<td>111</td>
<td>66.07%</td>
</tr>
<tr>
<td>7.1 – 11 years</td>
<td>34</td>
<td>20.24%</td>
</tr>
<tr>
<td>&gt; 11 years</td>
<td>23</td>
<td>13.69%</td>
</tr>
<tr>
<td>Revenue (Rupiah)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 50,000,000 per month</td>
<td>145</td>
<td>86.32%</td>
</tr>
<tr>
<td>50,000,000 – 100,000,000 per month</td>
<td>21</td>
<td>12.50%</td>
</tr>
<tr>
<td>&gt; 100,000,000</td>
<td>2</td>
<td>1.19%</td>
</tr>
</tbody>
</table>

To test the hypotheses of this study, multi-item scales are adopted from previous studies for the measurement of the constructs. All constructs are measured using 7-point Likert scales, ranging from “strongly disagree” (1) to “strongly agree” (7). The measurement of each variable is in Appendix 1.

### RESULTS

#### Normality

Normal distribution test is a test that measures whether we have a normal distribution of data so it can be used in parametric statistics (inferential statistics). Table 3 shows that the data has been normal in univariate but not multivariate. But in this case, we can continue to the next stage.

#### Validity and Reliability

Looking at Table 4, in the column of convergent validity, each item/indicator variable has a value of more than 0.5. Thus, no item/indicator can be eliminated from the analysis. All AVE value of
each variable is also above the required value of 0.5. As shown in Table 4, it can be concluded that this data is reliable because the construct reliability value of each variable is greater than the cut-off (> 0.60).

Goodness of Fit

Goodness of fit test is aimed to see whether the data are in accordance with the model that I am building. CFI, NFI, TLI, and RMSEA are a measure of goodness of fit. Data is said to be fit with mods if the value of CFI, AGFI, and TLI are more than 0.09 and RMSEA <0.08. The fit model in this study explains that has goodness fit model (CFI= 0.974; NFI= 0.939; TLI= 0.969; dan RMSEA= 0.064).

Table 3. Normality Analysis

<table>
<thead>
<tr>
<th>Indicator of Variable</th>
<th>Univariate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall profitability</td>
<td>1.420</td>
</tr>
<tr>
<td>Growth</td>
<td>0.763</td>
</tr>
<tr>
<td>Risk taking</td>
<td>1.325</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>0.961</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>0.666</td>
</tr>
<tr>
<td>Product novel in the market</td>
<td>0.793</td>
</tr>
<tr>
<td>Offering new ideas in market</td>
<td>1.247</td>
</tr>
<tr>
<td>Creative product</td>
<td>0.677</td>
</tr>
<tr>
<td>Offering new benefit</td>
<td>0.765</td>
</tr>
<tr>
<td>The product shows an unconventional way of solving problems</td>
<td>0.641</td>
</tr>
<tr>
<td>The product introduced many completely new features to the market</td>
<td>1.027</td>
</tr>
<tr>
<td>Faster than our goal</td>
<td>-1.531</td>
</tr>
<tr>
<td>Faster than competitor</td>
<td>-0.369</td>
</tr>
<tr>
<td>Learning about Environment</td>
<td>0.375</td>
</tr>
<tr>
<td>Tracking competitor strategy</td>
<td>0.116</td>
</tr>
<tr>
<td>Understanding market trend</td>
<td>-0.478</td>
</tr>
<tr>
<td>Responsive</td>
<td>-0.952</td>
</tr>
</tbody>
</table>

Multivariate 4.101

Hypothesis Testing

This study uses a structural equation model (SEM) and Amos 21 in processing the data. The use of SEM is useful because it allows researchers to simultaneously test the measurement model and the path model of the relationship between the variables tested. It is also beneficial because it allows for measurement error in both the explanatory variables and the model as a whole. I use a one-step modeling procedure in which the measurement and structural models are tested simultaneously.

Hypothesis 1 predicts that market sensing capability has positive and significant effect on product innovativeness success. Results relevant to this hypothesis are presented in Table
5 and indicate that, as predicted, market sensing capability have positive affect and significant to product innovativeness success (B =0.466, p < 0.05). H1 is accepted.

Hypothesis 2 predicts that market sensing capability has positive and significant effect on SMEs performance. Results show that market sensing capability have positive affect but not significant to SMEs (B =0.029, p > 0.05). H2 is rejected.

Hypothesis 3 predicts that market sensing capability have positive and significant effect on speed to market. As predicted, market sensing capability has positive affect and significant to speed to market (B =0.466, p < 0.05). H3 is accepted.

Hypothesis 4 predicts that speed to market has positive and significant effect on SMEs performance. Results indicate that speed to market has positive affect but not significant to SMEs performance (B =0.069, p > 0.05). H4 is rejected.

Hypothesis 5 predicts that entrepreneurial orientation has positive and significant effect on
product innovativeness success. As shown in Table 5, entrepreneurial orientation has positive affect but not significant to product innovativeness success (B =0.042, p > 0.05). H5 is rejected.

Hypothesis 6 predicts that market sensing capability has positive and significant effect on speed to market. Results reveal that market sensing capability has positive affect and significant to speed to market (B =0.466, p < 0.05). H6 is accepted.

Hypothesis 7 predicts that product innovativeness success has positive and significant effect on SMEs performance. Table 5 shows that product innovativeness success has positive affect and significant to SMEs performance (B =0.159, p < 0.05). H7 is accepted.

Hypothesis 8 predicts that product innovativeness success is a mediating variable of market sensing capability on SMEs performance (B =2.238, p < 0.05). H8 is accepted.

Hypothesis 9 predicts that product innovativeness success is a mediating variable of entrepreneurial orientation on SMEs performance. Result show that, as predicted, entrepreneurial orientation is a mediating variable of market sensing capability on SMEs performance (B =0.532, p > 0.05). H9 is accepted.

**DISCUSSION**

SMEs capability to sense the market directly has no significant effect to SMEs performance. This research does not have the same result with previous research, which explains market sensing capability’s effect to performance (Day, 1994, 2002; Tseng & Lee, 2014; Vorhies & Morgan, 2005). There are possibilities that cause market sensing capability to have no significance effect to
SMEs performance: (1) there has to be mediation variable. In this research, best mediating variable is product innovativeness success. Result of this research shows that market sensing capability affects product innovativeness success, then product innovativeness success also affects SMEs performance significantly; (2) when sensing the market, the owner’s short term objective is not to increase enterprise growth or profit, but understand consumer needs so that it will be able to provide new suitable product according to the consumer needs and wants; and (3) not all owners clearly understand about market sensing. There is a possibility that those owners understand just about market research concept.

Market sensing capability can increase product innovativeness success. Result of this research, which is the same as previous studies, explains that with the higher market sensing capability, the enterprise will be more capable to launch a new product (Calantone et al., 2002; Keskin, 2006). Although owners do not really understand about basic concept of market sensing, but empirically it can be known that the owners are capable of learning about the market. The owner can understand consumer needs and wants to be able to create new suitable product. Whether successful or not, innovative product affects SMEs performance (Akgun et al., 2009; Koellinger, 2008; Mansury & Love, 2008; Olavarrieta & Friedmann, 2008; Wang & Wang, 2012). Empirically, this research shows that the owners’ success to create innovative product will affect SMEs performance. This new innovative product must be needed by consumer. This will affect enterprise growth and profitability.

Speed of new product success launched at market is affected by market sensing capability. Empirically, this is evidenced by this research. Owner’s capability to sense or learn the market will determine speed of launch and development of new product. Unfortunately, this research does not find empiric evidence explaining how speed to market significantly affects performance, not as previous research of Homburg et al., (2007), Jaworski and Kohli (1993), Wei et al. (2014) indicated. It is possible to happen because most of consumers live away from city; thus, they are not up to date and do not come to SMEs location.

Entrepreneurial orientation has significant effect on product innovativeness success or business performance (Covin & Slevin, 1989; Frank et al., 2010; Hui Li et al., 2009; Lumpkin & Dess, 1996; Naldi et al., 2007; Wiklund & Shepherd, 2005). My study finds that entrepreneurial orientation has an effect on SMEs performance but does not find evidence that those affect product innovativeness success. There are several possible causes entrepreneurial orientation has no significant effect on the performance of SMEs. First, this study does not pay attention to the type of innovation, whether radical or incremental. Therefore, this study did not find any significant influence between entrepreneurial orientation and performance of SMEs. Second, the level of entrepreneurial orientation and level of product innovativeness success have no clear measure. The lack of clear standards between SMEs, especially leather and furniture, makes this study to not produce significant results.

CONCLUSION AND IMPLICATION

In this study, there are several objectives to be achieved. The first objective of this study was to test the effect of market sensing capability on SMEs performance, both directly and indirectly (product innovativeness success as intervening variable). Results of this study indicate that the product innovativeness success is a mediating variable of market sensing capability on the performance of SMEs. Market sensing capability does not have a direct influence on the performance of SMEs. This indicates that learning about the market, tracking competitors’ strategy, understanding market trends, and being
responsive indirectly improve performance. The indicators are proven to increase product innovativeness success before they affect the performance of SMEs. The second objective of this study was to test the effect of entrepreneurial orientation on SME performance, both directly and indirectly (product innovation success as an intervening variable). Results of this study indicate that product innovativeness success is not an intervening variable for entrepreneurial orientation on SME performance. The third objective is to test the effect of market sensing capability on speed to market. Learning about the market, tracking competitors’ strategy, understanding market trends, and being responsive allows SMEs to be more quick in entering the market compared with competitors. Last objective is to test the effect of speed to market on SME performance. To improve performance, SMEs engaged in the leather and furniture industries do not need to focus on the speed of market entry, since the results of this study indicate that speed to market has no significant effect on the performance of SMEs.

The findings of this study are worthy of two contributions to the entrepreneurship research. First, in the leather and furniture industries, the most important factor in achieving performance of SMEs is product innovativeness success. In this study of product innovativeness success is a mediating variable of market sensing capability on the performance of SMEs. Second, entrepreneurial orientation still are predictive in improving performance. This study suggests that entrepreneurial orientation is not a mediating variable on performance of SME.

From a practical perspective, this study provides meaningful implications for the owner or manager. First, speed to market is not a major consideration in improving the performance of SMEs. The owner or manager does not need to consider it. What should be given importance is how to focus on product innovation. The success of product innovation can improve performance. Second, the owner must be capable of sensing the market well. More established systems are required in performing market sensing. Sensing the market should be focused on improving performance since good performance increases SMEs growth or profitability. Sensing the market should be focused on product innovation. Innovation must be acceptable to the market so that the success of the product innovations can improve performance.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

There are some limitations in my study. First, this study focuses only on leather and furniture SMEs. Respondents in this study is a combination of these two SMEs. For future research, I recommend that if my research model is replicated, the models should be tested individually on two or more SMEs. Compare two or more SMEs on one model and see if it provides the same results. If the result is the same, then the model I have created can be generalized. Second, this research uses the purposive sampling method. The use of such method is possible, providing there is a normal data univariate but not multivariate. I suggest, on future research, to use random sampling method.

In addition to the above matters, I also recommend to (1) use control variables, such as size of SMEs, local culture, demographics, and so forth; and (2) make propositions on the market sensing and market SMEs. Sensing performance can be separated into three parts, namely, customer sensing, environmental sensing, and sensing competitors. Future studies should make proposition using three types of sensing (customer sensing, environmental sensing, and competitors sensing) on the performance of SMEs.
The mediating role of product innovativeness success


Minchner, A. (2009). The relationship between...


### Appendix 1. Measurement

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>ITEMS</th>
<th>Measurement Scale</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Sensing Capability</td>
<td>• Learning about environment</td>
<td>seven-point Likert scales (1= strongly disagree; 7= strongly agree)</td>
<td>Fang et al. (2014); Lindblom et al. (2008)</td>
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<tr>
<td></td>
<td>• Tracking competitor strategy</td>
<td></td>
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<td></td>
<td>• Understanding market trend</td>
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<td></td>
<td>• Responsive</td>
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<tr>
<td>Speed to Market</td>
<td>• Faster than competitor</td>
<td>seven-point Likert scales (1= strongly disagree; 7= strongly agree)</td>
<td>Akgun and Lynn (2002); Zhang and Wu (2013)</td>
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<tr>
<td></td>
<td>• Faster than our goal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product innovativeness success</td>
<td>• Product Novel in the market</td>
<td>seven-point Likert scales (1= strongly disagree; 7= strongly agree)</td>
<td>Zhang and Wu (2013); Bao et al. (2012)</td>
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<tr>
<td></td>
<td>• Offering new ideas in market</td>
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<td></td>
<td>• creative product</td>
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<td></td>
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<td></td>
<td>• offering new benefit</td>
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<td></td>
<td>• The product shows an unconventional way of solving problems</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• The product introduced many completely new features to The market</td>
<td></td>
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<tr>
<td>Entrepreneurial Orientation</td>
<td>• Risk Taking</td>
<td>seven-point Likert scales (1= strongly disagree; 7= strongly agree)</td>
<td>Covin and Slevin (1989)</td>
</tr>
<tr>
<td></td>
<td>• Innovativeness</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Proactiveness</td>
<td></td>
<td></td>
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<tr>
<td>SMEs Performance</td>
<td>• Growth</td>
<td>seven-point Likert scales (1= strongly disagree; 7= strongly agree)</td>
<td>Lindblom et al. (2008); (Omerzel and Antoncic (2008))</td>
</tr>
<tr>
<td></td>
<td>• Overal Profitability</td>
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