Market orientation and innovation on corporate performance: A study of food and beverage sector SMEs in Surabaya

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Abstract

This study aims to examine and analyze the influence of market orientation on corporate performance with exploration innovation and exploitative innovation as mediation in SMEs. 85 respondents were used as samples from food and beverage sector SMEs at Sentra Studio Surabaya. Purposive sampling was used as the sampling method. Data analysis in this study used Structural Equation Modeling - Partial Least Square (SEM PLS). The result indicates that market orientation has a significant effect on exploration innovation, exploitative innovation, and corporate performance. Exploration innovation has a significant effect on corporate performance; therefore, exploration innovation partially mediates the effect of market orientation on corporate performance. However exploitative innovation was found to have no effect on corporate performance. Changes in external factors, primarily due to the COVID-19 pandemic, are seen as being able to cause a paradigm shift on the importance of a long-term orientation compared to a short-term orientation.

Introduction

All around the world, small and medium-sized enterprises (SMEs) have a significant role in national economic development and as it is growing become more important to get more attention (Soininen et al., 2011). Indonesia is no exception, especially in East Java, data shows that in the last five years (2016-2020) micro, small, and medium enterprises contributed more than 50% of gross regional domestic product income. The emergence of the COVID-19 pandemic has had its own impact on SMEs. In Indonesia, the COVID-19 pandemic increased work termination. They indirectly were forced to switch to become businessmen and start their own business, this could cause irrational behavior which is focused on business profits alone to be able to survive (Wahyono et al., 2021). Based on this, SMEs need to develop management skills and business strategies to be able to compete.

Some previous studies show us that market orientation has a positive significant effect on the corporate performance of SMEs (Ali et al., 2020; Shamsudin & Hassim, 2020; Udriyah et al., 2019). On other hand, some show different results, Hult et al. (2005), and Perry & Shao (2002) had similar results that there is no direct relation between market orientation on performance. Grewal & Tansuhaj (2001) in their study even show that market orientation could have a negative effect on performance. Furthermore, methodological heterogeneity in the measurement and definition of market orientation and corporate performance have a role in giving inconsistent results (Gonzalez-Lez-Benito and Gonzalez-Lez-Benito, 2005).

The COVID-19 pandemic encourages entrepreneurs to change and adapt, this is where innovation plays an important role for SMEs. Innovation helps companies to cope with the instability of the external environment and is one of the main factors for long-term success in business, especially in dynamic markets. Companies with the innovation ability will respond to challenges more quickly and exploit new product and market opportunities better than companies that are less innovative (Jiménez-Jiménez and Sanz-Valle, 2011). According to Saunila (2014), through innovation orientation, SMEs will be able to receive more benefit. Innovation can be classified according to the degree of innovation and knowledge base: exploratory and exploitative. Exploratory innovation is an...
innovation to obtain and create something new and deviates from existing knowledge, while exploitative innovation improves and enhance existing what already exists based on existing knowledge (Benner & Tushman, 2002). Li, Zhou and Si (2010) point out that both exploratory innovation and exploitative innovation have a positive effect on corporate performance.

This study aims to examine and analyze the influence of market orientation on corporate performance in SMEs, both directly and indirectly through exploratory innovation and exploitative innovation. Taking a quantitative approach, this study takes samples of food and beverage sector SMEs at the Sentra Siola, SMEs center with the most members in Surabaya, East Java. This research is divided into several parts: introduction; literature review; research and method; results; discussions; and conclusions. This research is expected to contribute to the development of knowledge in the field of management, especially in market orientation, corporate performance, and innovation. The results of this study are important to be used by SMEs and local governments as material for consideration in evaluating and determining appropriate policies, especially during the era of pandemic.

Literature Review

Theoretical and Conceptual Background

Market Orientation

Market orientation is a broad concept whose relationship to other concepts depends on how it is interpreted. Market orientation can be defined as the corporate's method of creating superior performance and the behaviors needed to improve the corporate's performance (Maydeu-olivares & Lado, 2003; Udriyah et al., 2019). One of the early concepts of market orientation that is still widely used today was introduced by Narver and Slater (1990), market orientation is defined as an organizational culture, it contains the set of beliefs that puts forward the customer’s value to create a profitable corporation in a long-term (Gonzalez-Benito & Gonzalez-Benito, 2005). Another concept that is also widely used came from Kohli & Jaworski (1990), market orientation is derived from the implementation of the marketing concept as behaviors. According to Griffiths and Grover (1998) both concepts (as a culture and behavior) are compatible and complementary. Culture provides the rules of behavior, and behavior is the basis for the formation of beliefs and values.

The literature and previous studies show us that market orientation is one of the antecedents that improve performance. According to Kumar et al. (2011), corporations that are early to develop a market orientation have more benefits such as more sales and more profit compared to those that are late. These benefits also apply in the short and long run. Powers, Kennedy and Choi (2020) stated that the positive impact of market orientation on performance also can be seen through the perspective of managers, salespersons, and customers. Several studies of the relationship market orientation on performance in SMEs also indicate a significant effect (Ali et al., 2020; Shamsudin & Hassim, 2020; Udriyah et al., 2019).

Although many studies support a positive and significant relationship, some of them indicate contradictory results. Hult, Ketchen and Slater (2005) stated that there is no direct effect of market orientation on performance, therefore more studies should be looking and investigating relation related other performance antecedents. Perry and Shao (2002) had a similar result in their study, market orientation had no direct effect on performance. According to Grewal and Tansuhaj (2001), in the context after the economic crisis, market orientation had a negative effect on performance, this relation was moderated by technology uncertainty, competitive intensity, and demand.

Exploratory Innovation and Exploitative Innovation

Innovation in general can be conceptualized in many ways, most of the definitions of innovation share the idea that innovation implies the adoption of a new idea or behavior, literature also distinguishes different types of innovation (Jiménez-Jiménez & Sanz-Valle, 2011). According to the degree of innovation and knowledge base, innovation can be classified into exploratory innovation and exploitative innovation.

Exploratory innovation is radical innovation. It is creating new designs, develops new distribution channels, new market segments, creates knowledge that is completely new. Exploratory innovation has a long-term orientation, aims to pursue emerging possibilities to increase future income (Benner & Tushman, 2002; Jansen et al., 2006; March, 1991).

Exploitative innovation is incremental innovation. It is enhancing established designs, increases efficiency in the short term, improves an existing situation, knowledge, and skills. Exploitative innovation has a short-term orientation to increase current income (Benner & Tushman, 2002; Jansen et al., 2006; March, 1991).

Corporate Performance

Performance is multidimensional, it means can be measured by various methods that related to subject of interest (Udriyah et al., 2019). Some previous studies that analyzed the relation market orientation to performance defined corporate performance in many ways, namely: profitability, growth, sales, operational cost, new product performance, product and service quality (Carbonell & Rodríg, 2010; González-Benito & González-Benito, 2005; Grewal & Tansuhaj, 2001; Kumar et al., 2011). Multidimensional definitions of corporate performance are used to be able to see corporate performance holistically.
Research and Methodology

The sample was collected from food and beverage sector SMEs at Sentra Siola Surabaya. Sentra Siola was selected because it has the most SMEs members among other SMEs centers in Surabaya, where most of the SMEs are in the food and beverage sector with total 310 SMEs. Sentra Siola is managed and fully funded by Surabaya City government with the purpose to enhance the local economy through SMEs.

Purposive sampling was used. Data sources used are primary data, collected using a questionnaire consisting of statement items. Questionnaires are distributed face-to-face but due to the pandemic, questionnaires are also distributed online via e-form by contacting SMEs directly based on the information provided by the management of Sentra Siola. All indicators in the questionnaires using a Likert measurement scale with answers on each item of the instrument have gradations ranging from strongly disagree (score 1) to strongly agree (score 5). Statistical analysis was processed by using SmartPLS Program.

This research contains four variables which are market orientation, corporate performance, exploratory innovation, and exploitative innovation. Market orientation variable in this study is measured by three indicators: customer orientation, competitor orientation, and inter-functional coordination following the market orientation concept by Narver and Slater (1990). Indicators for measuring corporate performance refer to previous studies related to studies of market orientation: profitability, growth, sales, operational cost, new product performance, product and service quality (Carbonell & Rodri, 2010; González-Benito & González-Benito, 2005; Grewal & Tansuhaj, 2001; Kumar et al., 2011). Exploratory innovation and exploitative innovation are following concept by March (1991). Exploratory innovation is a radical change to pursue the advantages / possibilities that arise in the long term. Exploitative innovation is an enhancement/improvement of the existing situation to increase profits in the short term.

Analysis and Findings

85 of respondents was collected. Most SMEs are between 2 to 5 years old with 21 SMEs (23.5% of the total respondents) under 2 years old or founded during the pandemic. The majority of the respondents were 45-54 years old (36.5% of the total respondents). The gender of respondents show the majority of the female with 90.6%, this is in line with government data where small and micro businesses in Indonesia are dominated by female. Table 1 shows the percentage of gender, age, and age of SMEs.

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>77</td>
<td>90.6%</td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
<td>9.4%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 25</td>
<td>2</td>
<td>2.4%</td>
</tr>
<tr>
<td>25 - 34</td>
<td>16</td>
<td>18.8%</td>
</tr>
<tr>
<td>35 - 44</td>
<td>22</td>
<td>25.9%</td>
</tr>
<tr>
<td>45 - 54</td>
<td>31</td>
<td>36.5%</td>
</tr>
<tr>
<td>55 - 64</td>
<td>10</td>
<td>11.8%</td>
</tr>
<tr>
<td>&gt; 64</td>
<td>4</td>
<td>4.7%</td>
</tr>
<tr>
<td>Age of SMEs (year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 2</td>
<td>20</td>
<td>23.5%</td>
</tr>
<tr>
<td>2 - 5</td>
<td>41</td>
<td>48.2%</td>
</tr>
<tr>
<td>5 - 10</td>
<td>17</td>
<td>20.0%</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>7</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

Source: Primary data (2021)

Validity and Reliability

The average variance extracted (AVE) is used to evaluate a construct's convergent validity. The minimum acceptable AVE is 0.50 or higher. Composite reliability and Cronbach’s alpha are used for assessing internal consistency reliability, it is considered reliable if Cronbach’s alpha > 0.6 and composite reliability > 0.7, but values of 0.95 and higher are undesirable because that indicate the items are redundant, which means construct validity is reduce (Hair et al., 2019). Apart from validity and reliability, the expected R square is greater than zero. Table 2 shows the validity and reliability of the research model.

<table>
<thead>
<tr>
<th></th>
<th>AVE</th>
<th>Composite Reliability</th>
<th>Cronbach's Alpha</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Orientation</td>
<td>0.580</td>
<td>0.805</td>
<td>0.640</td>
<td></td>
</tr>
<tr>
<td>Exploratory Innovation</td>
<td>0.602</td>
<td>0.858</td>
<td>0.778</td>
<td>0.427</td>
</tr>
<tr>
<td>Exploitative Innovation</td>
<td>0.704</td>
<td>0.905</td>
<td>0.865</td>
<td>0.360</td>
</tr>
<tr>
<td>Corporate Performance</td>
<td>0.603</td>
<td>0.901</td>
<td>0.868</td>
<td>0.583</td>
</tr>
</tbody>
</table>

Source: SmartPLS Output Result (2021)
Structural Model Result

The structural model describes the relationships among latent variables. Path coefficient indicates the direct effect of a variable on another variable. The significance of the variable relationship seen from the T-statistic. The relationship between variables can be said to be significant if the T-statistic is greater than 1.96. P-value is the probability under a specified statistical model. The p-value of 0.05 and below is considered of statistical significance. The results of the path coefficient, T-statistic, and P-value on the bootstrapping test are presented in Table 3.

Table 3: Variable Relationship Result

<table>
<thead>
<tr>
<th>Variable Relationship</th>
<th>Path Coefficient</th>
<th>T-statistic</th>
<th>P-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Orientation &gt; Corporate Performance</td>
<td>0.286</td>
<td>2.696</td>
<td>0.007</td>
<td>Significant</td>
</tr>
<tr>
<td>Market Orientation &gt; Exploratory Innovation</td>
<td>0.653</td>
<td>8.089</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Market Orientation &gt; Exploitative Innovation</td>
<td>0.600</td>
<td>6.813</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Exploratory Innovation &gt; Corporate Performance</td>
<td>0.409</td>
<td>2.864</td>
<td>0.004</td>
<td>Significant</td>
</tr>
<tr>
<td>Exploitative Innovation &gt; Corporate Performance</td>
<td>0.163</td>
<td>1.187</td>
<td>0.236</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Indirect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Orientation &gt; Exploratory Innovation &gt; Corporate Performance</td>
<td>0.267</td>
<td>2.532</td>
<td>0.0012</td>
<td>Partial Mediation</td>
</tr>
<tr>
<td>Market Orientation &gt; Exploitative Innovation &gt; Corporate Performance</td>
<td>0.098</td>
<td>1.198</td>
<td>0.231</td>
<td>No Mediation</td>
</tr>
</tbody>
</table>

Source: SmartPLS Output Result (2021)

Discussion

The results of this study indicate a significant positive market orientation on the company's performance. This study supports several previous studies (Ali et al., 2020; Kumar et al., 2011; Powers et al., 2020; Shamsudin & Hassim, 2020; Udriyah et al., 2019). The results also confirmed positive significant market orientation on both innovations, exploratory and exploitative, as previous studies pointed out (Aydin, 2020; Carbonell & Rodrı, 2010; Maydeu-olivares & Lado, 2003). Exploratory innovation is proven to have a direct effect on corporate performance, it means the search for long-term opportunity able to lead increase in corporate performance. The results of this study support Arzubiaga et al. (2019) and Li et al. (2010), who prove that exploratory innovation has a positive influence on corporate performance. In addition, the results of the study also showed that exploratory innovation has a partial mediating role in the relationship between market orientation and corporate performance. It means that to increase the corporate performance not only through the main predictor variable, market orientation, but also through exploratory innovation. Unlike several previous studies (Arzubiaga et al., 2019; Li et al., 2010), the result indicates there is no direct relationship between exploitative innovation on corporate performance, therefore no mediating effect from exploitative innovation. Mcdermott and Prajogo (2012) pointed out that corporate size has a negative moderating effect on relationships between exploitative innovation and corporate performance. It means SMEs that relatively has small size will have more benefit from exploitative innovation compared to larger corporate. The smaller size also means that they can respond and adapt quickly to changes, so exploitative innovation which is focus on incremental improvement on short term orientation is seen as more compatible with SMEs. This study's result seems to
contradiction with general wisdom, but Li et al. (2010) pointed out that external factors, such as environmental competitiveness can enhance exploratory innovation outcomes but diminish exploitative innovation outcomes.

Looking at the context of the pandemic, specifically on SMEs in Indonesia. Wahyono et al. (2021) stated that the COVID-19 pandemic increased layoffs and forced them to start businesses which led to a significant increase in business competition. The social distancing policy effect of the COVID-19 pandemic for SMEs are decreased income and increased production costs, where businesses eventually switched to using information technology to survive, but the digital transformation carried out was still immature and tended to only follow other steps so its lacked uniqueness, thereby SMEs loss of opportunities to have competitive advantages against competitors (Lutfi et al., 2020; Muditomo & Wahyudi, 2020). Changes in external factors that occur suddenly seem to open up business actor's insight into future threats and opportunities, shifting the paradigm of the importance of a long-term orientation compared to the short-term orientation. It can be interpreted that SMEs' perceptions of exploratory innovations have a more important role in success through the pandemic period than exploitative innovations. This phenomenon still needs to be studied in future research.

Conclusions

In conclusion, based on this research results market orientation is proven to have a significant direct effect on corporate performance. Market orientation also has a significant effect on exploratory innovation and exploitative innovation. This shows the important role of market orientation and enhances SMEs to embrace it even more to receive more benefits. Exploratory innovation has a significant effect on corporate performance and has a mediating role between market orientation and corporate performance. On the other hand, exploitative innovation has no significant effect on corporate performance. Although exploitative innovations in this study were not proven to affect performance, this does not mean that it can be ignored right away. Some previous studies have proven that innovation plays an important role in improving performance, so it is important for SMEs to keep an eye on innovation in general. Changes in external factors, in this case, primarily the COVID-19 pandemic, have enhanced the digital transformation of SMEs significantly. The Digital era is starting to replace conventional methods where competition in business is no longer the same, based on this SMEs need to learn skills related to digitalization so that they are able to compete in the future. The local government also needs to give attention to embracing and enhancing digital base knowledge for SMEs

However, the samples that were used in this study was limited, which may impact the generalization of the finding. Further research is still needed, future researchers can expand the degree of generalization by taking samples from different sectors and locations, as well as taking samples from different sizes of companies. Further research can also add other variables in examining the relationship between market orientation and performance to develop a research model, for example, the role of digitalization which is now increasingly important, or the moderating of company size in this relationship.

Acknowledgement


Institutional Review Board Statement: Ethical review and approval were waived for this study, due to that the research does not deal with vulnerable groups or sensitive issues.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy.

Conflicts of Interest: The authors declare no conflict of interest.

References


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