The effect of strategic planning on competitive advantages of small and medium enterprises

Mulyaningsih\textsuperscript{a}, R. Deni Muhammad Danial\textsuperscript{a}, Kokom Komariah\textsuperscript{b}, R. Taqwaty Firdausijah\textsuperscript{c} and Yuyun Yuniartif

\textsuperscript{a}Universitas Garut, Indonesia
\textsuperscript{b}Universitas Muhammadiyah Sukabumi, Indonesia
\textsuperscript{c}Universitas Pasundan, Indonesia

ABSTRACT

This research starts from a phenomenon that indicates that the competitive advantage of Small and Medium Enterprises (SMEs) in increasingly fierce business competition has not yet achieved in Sukabumi, Indonesia. This is indicated by the inefficiency of production costs felt by SMEs which are not capable of creating competitive prices and the difficulty of making unique products. The purpose of this study is to determine the magnitude of the influence of dimensional strategic planning on the competitive advantage of SMEs. The results of the analysis and discussion are expected to find a concept regarding SME strategic planning. This study uses a quantitative approach, with an explanatory survey design that explains and describes the level of influence of strategic planning on the competitive advantage of SMEs in Sukabumi, Indonesia. By using data analysis of Structural Equation Modeling (SEM), the results of the study indicate that there is a significant influence of strategic planning on the competitive advantage of SMEs in Sukabumi, Indonesia. Strategic planning which consists of three dimensions, namely: the desires of external stakeholder, the company's internal encouragement, and the company's database, significantly influences the competitive advantage of SMEs. Of the three dimensions of strategic planning, the dimensions of external stakeholder have the highest influence, while the company's database have the lowest effect. These results practically imply for SMEs to increase the consideration of company database in preparing the SME strategic planning.

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Competitive advantage
SMEs
Cost leadership

1. Introduction

Strategic planning becomes very important to pay attention to every company, especially SMEs (Stonehouse & Pemberton, 2002; Gibbons & O’connor, 2005). The intended strategic planning is in terms of marketing, production, finance and human resources. Strategic planning is the process of selecting company goals, determining strategies, strategic programs, and determining the methods needed to ensure that strategies and policies have been implemented. Strategic planning is also a long-term planning process that is structured to achieve company goals. In other words, strategic planning is a systematic management process or a decision making process for programs to be carried out by the company and an estimate of the amount of resources that will be allocated in each program over the next few years. Strategic planning occupies a crucial position, since it determines the comprehensive, coherent, and balanced long-term plans and short-term plans produced by the company. This strategic planning is certainly prepared by the leadership of the company involving other parties who are considered important and necessary (Wang et al., 2007). Oktavina (2008) states that strategic management is devoted to performance evaluation and strategy implementation that will result in SME performance and competitive advantage (Awino, 2013). The external and
internal environment is an inseparable part that must exist in strategic planning. Naranjo-Valencia et al. (2016) links the factors of both the internal or external environment with the performance of small businesses that are associated with personality, organizational culture and business strategy orientation. Nurhajatie (2009) examined entrepreneurial orientation and social capital and their influence on organizational performance improvement strategies which is an empirical study on. Heatubun (2008) examines the role of small and medium-sized businesses in economic growth and exports. Duhan et al. (2001), Camuffo & Comacchio (2005), Anggraeni (2020), Tehseen & Ramayah (2015) show the relationship between managers and access to information on the competitive advantage of small businesses and their implications for business success achieved by cost and differentiations. Basri (2005) suggested the influence of cooperative advantage strategies on the competitiveness of small and medium-sized companies in international marketing. Prior studies have focused more on the competitiveness of SMEs at the international level (Singh et al., 2010; Di Gregorio et al., 2009; Coviello, 1998; Vătămâncescu et al., 2017), and less focus on the competitive advantage of SMEs in the local context, especially in the use of databases and networks. Most SMEs face inefficient production costs so they do not create competitive prices and the difficulty of making unique products that can differentiate from other companies on the same product. In addition, competitive advantage is highly dependent on the preparation of strategic planning. To anticipate the inability to improve SMEs' competitive advantage, strategic planning is needed. This study seeks to conduct research with a strategic planning construct and competitive advantage in the research focus in the form of SMEs producing metal products in Sukabumi, Indonesia.

2. Literature Review

Allison and Kaye (2005) define strategic planning as a systematic process agreed upon by the organization and build involvement among key stakeholders about priorities that are essential to its mission and responsive to the operating environment. Strategic planning is specifically used to sharpen the focus of the organization, so that all organizational resources are used optimally to serve the organization's mission. This means that strategic planning as a guideline for an organization must be responsive to a dynamic and unpredictable environment. The strategic planning process consists of three main components (Armstrong, 1982; Shrader et al., 1989) including formulation, which includes the development of the mission, determination of the main objectives, assessment of external and internal environment and evaluation and selection of alternatives; application; and controlling. Orpen (1985) states that strategic planning benefits small companies by encouraging them to look for new alternatives to increase their sales and competitive position. Bracker et al. (1988) suggested that careful strategic planning benefits small companies in a rapidly developing dynamic industry. Rue and Ibrahim (1998), Shrader et al. (1989) stated that managers in small and medium-sized companies indicate that company planning is generally done on their own, which means managers as well as planners. Strategic planning in various business circumstances that should be owned by companies both large and small, because with strategic management will be able to function as a means to communicate corporate objectives and alternative paths that will be taken to achieve these goals. Strategic planning usually covers a period of one to five years (Rue & Ibrahim, 1998). Strategic planning is a guideline for an organization to respond to a dynamic and difficult to predict environment. Strategic planning emphasizes the importance of making decisions that place the organization to respond successfully to changes in the environment. In an effort to increase competitive advantage, it is necessary to explore further the factors that can influence a strategic planning so as to create the value of competitive advantage. Regarding the basis of strategic planning, there are 2 basic corporate strategic plans. First, anticipatory intuitive planning is a plan that is based on the experiences, instincts, considerations and reflective of a manager, in other words anticipatory intuitive strategic planning is planning based on past experiences, considerations and reflective thinking. Usually this kind of planning is determined not formally alias non-formal. Second is formal long-term planning that is planning based on procedures, research, involving many people and producing a set of written plans. Thus, this kind of planning can be said as formal strategic planning (Robinson & Pearce, 1983).

3. Hypothesis

Formulating the dimensions of strategic planning is a task for researchers because strategic planning theory is always discussed in a more general perspective, so a red thread should be drawn when formulating how strategic planning is formed. The theory of strategic planning becomes a little complicated when it is associated with SMEs, because there have not been many SME strategic planning studies conducted specifically in Indonesia. The SME strategic planning that the researchers formulated is the desire of external stakeholder, the company's internal encouragement, the company's database, the evaluation of the external environment and evaluation of the internal environment. However, in this study, environmental evaluation will not be included in strategic planning because all companies will certainly do an analysis or evaluation of the environment both outside and inside without question. Thus, the SME strategic planning formulated is the desire of external stakeholder, the company's internal encouragement and the company's database. Regarding the wishes of external stakeholder, Steiner (1979) explains some of the stakeholder referred to: the community, certain communities, owners of capital, customer suppliers and creditors. The company's internal encouragement consists of: top managers, lower level managers, workers related to the production process, and administrative employees. For the company's database, Steiner (1979) divides it into three, that are past performance, current situation and forecasting the future. Regarding the relationship between strategic planning and competitive advantage, many researchers have already done so, including Powell (1992), Veskaïsri et al. (2007), Schmidt (2010), O'Regan and Ghabadian (2007), Lyles et al. (1993), Jusoh and Parnell (2008), Weil (1985) state that there are several
ways to create competitive advantages for companies, especially SMEs, through differentiation, cost leadership, response speed and market focus.

H1: There is a significant effect of external stakeholder on SME strategic planning
H2: There is a significant effect of internal encouragement on SME strategic planning
H3: There is a significant effect of company database on SME strategic planning
H4: The higher the strategic planning, the higher the competitive advantage of SMEs

![Fig. 1. Research Framework]

4. Research Method

This study collected a sample of 106 respondents from entrepreneurs in Sukabumi. This research is a causality model (causal relationship/influence). The analysis in this study was examined through the relationship structure of a number of series equations using the Structural Equation Model (SEM) analysis tool. SEM Equation Model is a statistical technique that is used to test a series of relationships between several variables formed from factor variables or observed variables. The statistical verification analysis method in the study was conducted using the Structural Equation Modeling (SEM) method with the help of LISREL 9.10 software. This research technique will use two approaches: (1) confirmatory factor analysis, to confirm the most dominant factors in a group of variables, (2) regression weight in SEM that is used to examine how much the relationship between variables.

5. Result

5.1 Influence of External Stakeholder, Internal Encouragement and Enterprise Database on SME Strategic Planning

The results of the analysis of the SME strategic planning variable measurement model that is used to explain the three dimensions more accurately, are analyzed using the path coefficient and t-value are presented in Table 1.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Factor Loading</th>
<th>R²</th>
<th>Error Var.</th>
<th>t-arith</th>
<th>t-table</th>
<th>note</th>
</tr>
</thead>
<tbody>
<tr>
<td>External stakeholder (X1)</td>
<td>2.35</td>
<td>0.686</td>
<td>2.59</td>
<td>10.26</td>
<td>1.98</td>
<td>Sig.</td>
</tr>
<tr>
<td>Internal encouragement</td>
<td>1.69</td>
<td>0.670</td>
<td>1.41</td>
<td>10.19</td>
<td>1.98</td>
<td>Sig.</td>
</tr>
<tr>
<td>Company database</td>
<td>1.11</td>
<td>0.636</td>
<td>1.11</td>
<td>9.83</td>
<td>1.98</td>
<td>Sig.</td>
</tr>
<tr>
<td>Construct reliability</td>
<td>0.883</td>
<td>0.683</td>
<td>0.66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 presents the results of the calculation of the measurement model from the path coefficient (factor loading) to the significance of the coefficient. It can be seen from the table that all dimensions have path efficiency greater than 0.50 so it can be concluded that all dimensions are valid in measuring strategic planning. From the results of hypothesis testing can also be seen in the column description of all dimensions expressed significant in measuring. Furthermore, the construct reliability coefficient has a value of 0.883, greater than 0.700, so it can be stated that all dimensions consistently measure SME strategic planning. This value also illustrates that 88% of the diversity of the SME strategic planning can be reflected by three dimensions, namely the desires of external stakeholder, the company's internal encouragement, and the company's database. Furthermore, the extracted variance coefficient value is 0.66, indicating that 66% of the diversity of the four dimensions can be explained by SME strategic planning. From these three dimensions, it is seen that the dimension that is most capable of measuring strategic planning. The results of the study show the dimension of external stakeholder (X1) has a path coefficient of 2.35 with the results of the test of the path coefficient being declared significant with coefficient greater than 0.5. This indicates that this dimension can validly measure SME strategic planning. The reliability coefficient R2 of 0.686 states that 68.6% of the diversity of this dimension is influenced by SME strategic planning. The dimension of the company's internal encouragement (X2) has a path coefficient of 1.69 with the results of the test of the path coefficient being declared significant and a coefficient greater than 0.5 indicates that this dimension can validly measure SME strategic planning. The reliability coefficient R² of 0.67 states that 67% of the diversity of this dimension is influenced by SME strategic planning. The company database (X3) has a path coefficient of 1.11 with the results of the test of the path coefficient being declared significant and a coefficient greater than 0.5. This indicates that this dimension can validly measure SME strategic planning. The reliability coefficient R² of 0.636 states that 63.6% diversity of this dimension is influenced by SME strategic planning.
5.2 Cost and Differentiation, Responsiveness, Market Focus on Competitive Advantage

Competitive advantage is measured using 4 dimensions: cost leadership, differentiation, responsiveness and market focus. Calculation results for path coefficient (factor loading) of competitive advantage (Y) for the four dimensions are presented in Fig. 2.

![Diagram showing competitive advantage dimensions](image)

**Table 2**
Analysis of Measurement Model of Competitive Advantage

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Factor Loadings</th>
<th>( R^2 )</th>
<th>Error Variance</th>
<th>( t )-arith</th>
<th>( t )-table</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost leadership (Y1)</td>
<td>0.89</td>
<td>0.220</td>
<td>2.805</td>
<td>3.32</td>
<td>1.98</td>
<td>Sig.</td>
</tr>
<tr>
<td>Differentiation (Y2)</td>
<td>2.57</td>
<td>0.199</td>
<td>26.57</td>
<td>3.35</td>
<td>1.98</td>
<td>Sig.</td>
</tr>
<tr>
<td>Responsiveness (Y3)</td>
<td>0.65</td>
<td>0.0542</td>
<td>7.36</td>
<td>2.04</td>
<td>1.98</td>
<td>Sig.</td>
</tr>
<tr>
<td>Market Focus (Y4)</td>
<td>2.26</td>
<td>0.495</td>
<td>5.22</td>
<td>4.14</td>
<td>1.98</td>
<td>Sig.</td>
</tr>
</tbody>
</table>

**Construct Reliability**

| Extracted Variance | 0.92 |

**Chi-Square** 34.30, \( df = 13 \), \( P \)-value = 0.00108, RMSEA = 0.118

![Fig. 2. Model of Competitive Advantage Measurement (Standardized Coefficient)](image)

Fig. 2 shows the path for the measurement model results on the magnitude of the coefficient values of each dimension related to competitive advantage. The results of the values from each dimension show coefficient value>0.50. The results of the analysis of the measurement model of competitive advantage, namely the path coefficient and the value of t-value are given in Table 2, which presents the results of the calculation of the measurement model from the path coefficient (loading factor) to the significance of the coefficient. The results show all dimensions have a path coefficient greater than 0.50. All dimensions are valid in measuring the latent variable of competitive advantage. Furthermore, the construct reliability coefficient has a value of 0.92, greater than 0.70. The results show that all dimensions consistently measure the competitive advantage. This value also illustrates that 92% of the proportion of the variance of competitive advantage was reflected by the four dimensions of cost leadership (Y1), differentiation (Y2), responsiveness (Y3) and market focus (Y4). Furthermore, the extracted variance coefficient value of 0.67 shows that 67% of proportion of the variance of the four dimensions can be explained by the latent variable of competitive advantage. It appears that all dimensions have a large coefficient of loading factor so that these four dimensions are quite capable of reflecting competitive advantage. The cost leadership (Y1) has a path coefficient of 0.89 with the results of the test of the path coefficient being declared significant and a coefficient greater than 0.5. This indicates that this dimension can validly measure competitive advantage. The reliability coefficient R^2 of 0.220 states that 22% proportion of the variance is influenced competitive advantage. The dimension of differentiation superiority (Y2) has a path coefficient of 2.57 with the results of the test of the path coefficient declared significant and a coefficient greater than 0.5. This indicates that this dimension can validly measure competitive advantage. The reliability coefficient R^2 of 0.054 states that 5.4% proportion of the variance of this dimension is influenced by competitive advantage. The market focus (Y4) has a path coefficient of 2.26 with the test results of the path coefficient being declared significant and a coefficient greater than 0.5. This indicates that this dimension can validly measure the competitive advantage. The reliability coefficient R^2 of 0.495 states that 49.5% proportion of the variance is influenced by competitive advantage.

5.3 Structural Model Analysis and Hypothesis Test

Structural equation modeling analysis examines the effect of strategic planning on the competitive advantage of SMEs. Analysis of the structural model is shown in Fig. 3.

![Fig. 3. Std. Coefficient Strategic Planning for Competitive Advantages of SMEs](image)

Fig. 3 is a structural equation model that reflects structural equations and measurement equations. Structural equations show the relationship between exogenous (strategic planning) and endogenous variables (competitive advantage). The results show the relationship between the effects of strategic planning on competitive advantage. From the calculation results, the coefficient of the strategic planning path to the competitive advantage of SMEs is 0.84 with a calculated value of 4.32 with an error.
variance of 0.30. The path coefficient of 0.84 indicates that the influence of strategic planning on competitive advantages of SMEs is 0.84 (std. dev). By squaring the path coefficient, the coefficient of determination is obtained with a value of 0.70. This value explains that 70% of the proportion of the variance of competitive advantage was explained by strategic planning. The result of t-value, (4.32)> t-table (1.98), so that the hypothesis is accepted (Table 3). Table 4 shows the magnitude of the direct and indirect effects of strategic planning on the indicators of competitive advantage.

### Table 4

<table>
<thead>
<tr>
<th>Endogenous Variables</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive advantages</td>
<td>0.84</td>
<td>0.746</td>
<td>0.746</td>
</tr>
<tr>
<td>Cost leadership (Y1)</td>
<td>-</td>
<td>2.152</td>
<td>2.152</td>
</tr>
<tr>
<td>Differentiation (Y2)</td>
<td>-</td>
<td>0.545</td>
<td>0.545</td>
</tr>
<tr>
<td>Responsiveness (Y3)</td>
<td>-</td>
<td>0.545</td>
<td>0.545</td>
</tr>
<tr>
<td>Market Focus (Y4)</td>
<td>-</td>
<td>0.545</td>
<td>0.545</td>
</tr>
</tbody>
</table>

Table 4 shows the direct effect of strategic planning on the competitive advantage of SMEs at 0.84. Moreover, the influence of SME strategic planning indirectly on the indicator of cost leadership is 0.746; the effect to the indicator of excellence differentiation is 2.152; for a responsiveness is 0.545; and to the market focus is equal to 0.545. The results show that the influence of strategic planning on SME competitive advantage is seen from changes in the indicators of cost leadership and differentiation. The test results indicate that the cost leadership indicator is indirectly influenced by the variable strategic planning. The results support several previous findings that show a relationship between cost performance and strategic planning and with broader elements of management system (Nair et al., 2015; Kharub et al., 2019; Suarez et al., 2016; Amelsberg, 2002; Emmett, 2005). Strategic planning is to create their products so that they have a competitive advantage in the market, especially in terms of cost advantages compared to other companies with the same product, including governance and implementation of guidelines regarding efficient production costs, low average cost, marginal costs low, and competitive cost efficiency when developing strategic planning.

### 6. Conclusion

Strategic planning in the company shows that the company is directed, not working as it wishes. With strategic planning, efficiency and effectiveness of the company will be created. Strategic planning is one aspect that is quite important for the achievement of overall company goals. The test results show the strategic planning of the competitive advantage of SMEs in Sukabumi which is a reflection of the results of the accumulation of the three dimensions. The dimension that has the lowest value in its ability to reflect the strategic planning variable is the company's database dimension; while the greatest ability is the dimension of the wishes of the outer stakeholder. The analysis also shows that SME strategic planning has a significant influence on the competitive advantage of SMEs. This relationship implies that the three dimensions build SME strategic planning to provide a high contribution to the competitive advantage of SMEs. The internal encouragement has a path coefficient with significant result. The test also indicates the reliability coefficient of this dimension is influenced by strategic planning. This internal encouragement dimension of the company, both in terms of path coefficient and reliability coefficient, has provided a significant and valid measurement second only to the dimensions of the wishes of the external stakeholder, and is more significant and more valid than the dimensions of the company database. The statistical analysis also highlights that strategic planning is empirically proven to affect competitive advantage, especially the dimensions of differentiation. Strategic planning in this context refers to efforts to create their products in order to have a competitive advantage in the market, especially superiority in product differentiation compared to other companies with the same product, including regarding the types of products that are in line with consumer expectations, good product quality, shape products according to consumer expectations, timeliness of product handover, good service quality, good after-sales service, easy payment methods, good impression, use of the latest technology, good company reputation, consistency in production, and good image when formulate strategic planning. Practically, this finding lays an important foundation that strategic planning is vital for all types and sizes of companies, in this case SMEs. The implication, strategic planning is also not distinguished whether it is formal or informal. In terms of existence, formal strategic planning is no better than informal strategic planning, and vice versa. Thus, strategic planning must be owned by all companies including SMEs, both formal and informal. Strategic planning also in its preparation must consider at least three things, namely the desires of external stakeholder, the company's internal encouragement and the company's database.

### References


