The impact of entrepreneurial orientation and company innovation on the business performance of manufacturing SMEs

Hapsawati Taan1+ Heldy Vanni Alam2 Sitti Rukayah3 Yulinda Lubis Ismail4 Nur Fadilah Arsyad5

Department of Management, Faculty of Economy, Universitas Negeri Gorontalo, Indonesia.
Email: hapsawatitaan@ung.ac.id
Email: heldy.alam@ung.ac.id
Email: yulindaismail76@gmail.com
Email: nurfarasyad@gmail.com

Master of Management, Faculty of Economy, Universitas Fajar, Indonesia.
Email: rukaiyah.st2609@gmail.com

ABSTRACT

This study examines the importance of entrepreneurial orientation in relation to innovation and performance within the context of manufacturing small and medium-sized enterprises (SMEs). Additionally, it looks into the impact of innovation on manufacturing SMEs' performance as well as the impact of entrepreneurial innovation on those SMEs' performance. The research population involved all manufacturing SMEs in Gorontalo Province, Indonesia. Sampling processes apply the nonprobability sampling method. The selection of cluster sampling, involving 150 samples, was carried out purposively. Data analysis was carried out using structural equation modeling with software called Analysis of Moment Structures (Amos). The findings indicate a favorable and statistically significant relationship between entrepreneurial orientation and both innovation and performance in manufacturing small and medium-sized enterprises (SMEs). Furthermore, the integration of entrepreneurial orientation and innovation inside small and medium-sized firms (SMEs) operating in the manufacturing sector has been identified as having a substantial and advantageous influence on their overall performance. It is noteworthy that the introduction of innovation within a firm does not have any discernible influence on the operational performance of small and medium-sized enterprises (SMEs) in the manufacturing sector. This study suggests that people involved in manufacturing SMEs must boost their performance by being proactive towards an entrepreneurial orientation. It is recommended for SMEs in Gorontalo City to enhance the implementation of entrepreneurial orientation for the development of their businesses. It is also essential to consider the factors of proactive attitudes, enthusiasm, and risk-taking attitudes.

Contribution/Originality: My research is unique in exploring how innovation mediates the relationship between entrepreneurial orientation and SME performance. Unlike previous studies that mainly focused on the direct effects, my research adds a new layer of analysis, providing a deeper understanding of how entrepreneurial orientation influences performance through innovation.
1. INTRODUCTION

Entrepreneurial activities represented by small and medium enterprises (SMEs) in Gorontalo, Indonesia, have key roles in regional economic development. SME is defined by Indonesian Law Number 20/2008 as productive businesses owned by individuals or business entities that have met the requirements of small businesses (Sari & Suryaningrum, 2019). This claim implied that SMEs’ can be considered small-scale businesses that occupy a crucial role in economic growth, especially in Indonesia. The population of SMEs in Gorontalo is 99.2%, contributing 78% to the country’s development and 57% to the gross domestic product. Due to their strategic socio-economic and political functions, manufacturing SMEs are considered the backbone of the province’s economy.

SMEs in Gorontalo are active in commercial businesses, agricultural sectors, services and manufacturing. Manufacturing SMEs, which serve as suppliers of goods and services for more prominent companies, are among policymakers’ priorities to speed up economic growth. This creates more job opportunities, alleviates poverty, and improves people’s welfare.

SMEs in the province of Gorontalo have progressed significantly. Despite this, surviving in the domestic and global markets is regarded as a pressure for many SMEs. This is due to constant changes in global competition, technological advancement, and consumer needs (Idar & Rosli, 2012). The data from the Department of Industry and Trade Cooperatives, Gorontalo Province (Diskoperidag, 2018) has reported several issues encountered by the owners of SMEs, especially those hindering the performance of the business. First, innovation in products, production, organization and management, and marketing systems are in need of improvement. Many SMEs still apply traditional production methods. Second, production volumes are still low, and market share has yet to reach the international market or exports due to the emphasis on the domestic market.

The current phenomenon indicates many factors causing the low performance of SMEs. Most SMEs display a lack of competitiveness, innovation, and market access. Other major issues that perplex the majority of SMEs involve limited access to resources and poor marketing. Studies have also reported that the lack of an entrepreneurial orientation is one of the problems among SMEs (Ali, Hilman, & Gorondutse, 2020; Asad, Shabbir, Salman, Haider, & Ahmad, 2018). It is worth noting that some SMEs have problems in terms of innovation. Innovation is one of the primary instruments of growth and market entry strategies, which increase market shares and stimulate the company’s competitiveness (Gunday, 2011). Furthermore, innovation is a potential solution for SMEs (Haroon Hafecz, Noor Mohd Shariff, & Bin Mad Lazim, 2012).

This study primarily aimed to discover and analyze the influence of market orientation and entrepreneurship on the performance of manufacturing SMEs through company innovation in Gorontalo City. The author focused on analyzing the said focus on smaller-scale companies such as SMEs as opposed to their larger counterparts since the lack of research in this specific field leads the manufacturing SMEs to confusion, and in order to compensate for this gap, this study is deemed essential. In addition, this study is expected to provide empirical and thought-provoking contributions to the development of the management theory and practice of companies, particularly in the completion of the concepts of market orientation, entrepreneurial orientation, innovation, and company performance. The study conducted could serve as a valuable resource for the government of Gorontalo in informing their decision-making process regarding SMEs manufacturing. Furthermore, it can provide valuable insights and inspiration to individuals involved in SMEs, aiding them in enhancing their business performance and achieving sustainable growth and a competitive advantage in the global market.

2. LITERATURE REVIEW

2.1. Entrepreneurial Orientation

Al-Swidi and Al-Hosam (2012) assert that entrepreneurial orientation positively and significantly determines the performance of the company. In the same vein, Hassim, Abdul-Talib, and Abu Bakar (2011) add the significance of entrepreneurial orientation to business. Entrepreneurial orientation serves as an input to market orientation,
considering its positive impacts. Alma (2018) points out the potential of entrepreneurship for development as it opens job opportunities and increases people’s income. By looking at the claims, it is safe to define entrepreneurship, in its dynamics, as a process of creating or producing something and adding value to the product through complex work at the right time. The process requires an estimation of support funds and social risks to receive financial rewards and attain personal satisfaction and self-reliance. Furthermore, “entrepreneurial orientation” refers to a company’s strategic orientation, which includes gaining unique entrepreneurial features in decision-making styles, practices, and procedures. One of the dimensions of entrepreneurial orientation is innovativeness; it primarily influences the performance of research and development functions, directly influencing marketing and sales performances (Rezaei & Ortt, 2018). Investigating entrepreneurial orientation is essential since it is a set of abilities a company possesses to produce or obtain a new product. Based on this claim, it is safe to assume that it contributes to economic growth and people’s productivity and has become central to providing technology, products, and services and rejuvenating competition in the market (Stoner, Edward, & Daniel, 1994). Promising entrepreneurs involve innovative, creative, forward-looking, achievement-oriented people and those who dare to take risks. They are well known for their originality, persistence, discipline, and motivation (Sumarsono, 2010). Nitiusastro (2012) adds that entrepreneurs are obliged to possess qualities such as willingness and self-confidence, goal setting, hard work, and accountability. Several studies have reported the entrepreneurial orientation's significant and positive impact on the company's innovation and the performance of manufacturing SMEs (Pramesti & Gusti, 2016; Silviasih & Denny, 2016). Entrepreneurial orientations are the capabilities and resources that instill competitive advantages and quality performance in a business. The significance of entrepreneurial orientation for business performance has been identified in several studies (Hassim et al., 2011; Pattipeilohy, 2018; Utaminingsih, 2016). SMEs entrepreneurs will be proactive in investigating the market opportunity. Al-Swidi and Al-Hosam (2012) claim that ongoing innovation is crucial to reflecting the entrepreneurial orientation concept compared to the risk-taker variable. The main driving force for small and medium-sized enterprises (SMEs) is the adoption of innovative tactics, which can be facilitated by the establishment of a creative culture in a deliberate and organized fashion. The improvement of small and medium-sized enterprises (SMEs) performance is closely linked to the implementation of innovative strategies (Salim & Mohamed, 2011). It is also added by Hassim et al. (2011) that entrepreneurial orientation and innovation significantly positively affect the performance of manufacturing since entrepreneurial-oriented SMEs’ entrepreneurs would be more proactive in seeing the market opportunity; therefore, it is safe to assume that entrepreneurial orientation is vital for those who want to seek an increase in the company’s performance. In addition, Rosenbusch, Rauch, and Bausch (2013) reveal that businesses can benefit from a complex environment by implementing a high degree of EO. The research framework is illustrated in Figure 1, based on the above concepts’ elaboration.

2.2. Innovation in Company

Developing manufacturing SMEs in Indonesia is of paramount importance concerning its strategic socio-economic and political functions. This attempt is also among the priority sectors receiving significant attention.
from policymakers to speed up economic growth. The prominent role of manufacturing SMEs development in economic sectors is workforce absorption. In Indonesia, most SMEs focus on agro-industrial sectors (Kuswantoro, Rosli, & Kader, 2012). Chang and Webster (2019) report that the innovation of SMEs in Australia has a positive contribution to export rates. There is a positive and significant correlation between government networks and exports. In this concept, exporting SMEs plays a vital role in the instrument, and government networks are more capable of providing resources such as facilities and information. The context of global market value and government networks is more effective for providing resources to SMEs. Selvarajah, Le, and Sukunesan (2019) demonstrate the importance of cross-cultural skills for exporting SMEs in Vietnam. Training needs vary by region, stage of SME development, and regional cultural context. It is suggested that the identification process be systematically conceptualized before designing and implementing training to encourage exports. An analysis of the training needs of SME managers can be performed by proposing appropriate training programs to support SMEs in internationalization, such as foreign language communication training to help exporters. Various empirical studies show problems that SMEs have encountered in improving their performance. The majority of such issues revolve around SMEs’ performance. Information obtained from the Department of Industry and Trade of Gorontalo Province (Diskopernad, 2018) reported several obstacles, including productivity, a lack of product innovation, and proactiveness in developing businesses. It is worth noting that some SMEs have problems in terms of innovation within the company. This condition should be a concern for improving the performance of manufacturing SMEs. In addition, conflicting research results indicate a gap in performance research. This can cause confusion and doubt for the owners and managers of manufacturing SMEs in determining which should be applied as a reference in strategic decision-making. Despite having a strategic role, the management of manufacturing SMEs is a perplexing task (Marsuki, 2006; Najib, 2006). SMEs’ problems revolve around a lack of knowledge about the market, a lack of capital, and low technological awareness. Galindo-Martín, Méndez-Picazo, and Castaño-Martínez (2019) state that it is necessary to have adequate support for environmental behavior and innovation to stimulate economic growth. In this case, innovation is central to economic development and market activity improvement. Chang and Webster (2019) examine how SMEs utilize government, industry, and professional networks and the impact of innovation and environmental competitiveness on SMEs. Their study reveals a difference in the relationship between network utilities and the performance of government, industry, and professionals in influencing exports.

Some small and medium-sized enterprises (SMEs) face challenges in fostering an innovative environment, which is crucial for their growth strategies and market entry. Continuous innovation efforts have been found to enhance productivity outcomes more effectively compared to companies that lack a focus on continuous innovation (Iandolo & Ferragina, 2019). Innovative companies have a positive impact on export productivity (Iandolo & Ferragina, 2019). Entrepreneurial orientation has been identified as a common issue in many SMEs, affecting their performance (Haroon Hafeez et al., 2012). Historical lessons suggest that supportive policies towards entrepreneurship, combined with effective governance systems, can create ample opportunities for entrepreneurs and facilitate the success of technical and financial innovations (Toms, Wilson, & Wright, 2020).

Prior studies have demonstrated a significant and positive relationship between entrepreneurial orientation and the performance of manufacturing SMEs (Layoo & Rahman, 2019; Santhi & Yuniar, 2020; Wirawan, 2017). Innovation is a critical factor influencing SME performance and offers potential solutions for their growth (Haroon Hafeez et al., 2012; Huda, Karsudjono, & Maharani, 2020). Additionally, research by Putri and Ni Nyoman (2018) indicates a positive and significant impact of innovation on marketing performance. However, empirical evidence regarding the relationship between innovation and SME performance remains limited (Man, 2009), with some studies reporting no significant correlation between the two (Man, 2009). On the other hand, Hassim et al. (2011) highlight the importance of entrepreneurial orientation in businesses, and numerous studies (Santhi & Yuniar, 2020; Veglio & Zucchella, 2015) support its positive and significant influence on the performance of manufacturing SEMs. Innovation is the driver of the internationalization process of traditional manufacturing SMEs, especially design
innovation. The present work explores the significance of entrepreneurial orientation on (1) innovation and (2) the performance of the company and manufacturing SMEs, the significance of innovation on (3) manufacturing SMEs' performance, and (4) the impact of entrepreneurial innovation on manufacturing SMEs performance.

2.3. Relationship between Entrepreneurial Orientation and Performance of Manufacturing SMEs

Entrepreneurial orientation has garnered significant attention in organizational and entrepreneurial literature, with the assumption that it affects SMEs' performance in various ways (Vij & Bedi, 2012). Shah and Ahmad (2019) conducted a study revealing that companies with a higher entrepreneurial orientation tend to outperform those with a lower orientation. Specifically, proactiveness and risk-taking were found to have a positive relationship with SME performance. Similarly, another study by Isichei, Emmanuel Agbaeze, and Odiba (2020) demonstrated a positive impact on SME performance when innovativeness and proactiveness were present.

Innovation plays a crucial role in leveraging opportunities and adapting to evolving customer preferences and demands, thereby justifying an organization's entrepreneurial orientation (Vij & Bedi, 2012). This reinforces the notion of the positive impact of innovation on business performance. It can be reasonably assumed that entrepreneurial orientation has the potential to yield improved results for business performance, considering its impact on innovation.

3. METHODOLOGY

3.1. Research Design

This research is conducted by the explanatory or deductive method, which focuses on exploring the causal relationships among research variables through hypothesis testing developed by Ferdinand (2013) and Hair and Rolph (2000). From the dimension of time, this study was a cross-sectional study and used a quantitative approach to examine the research subjects, i.e., the owners or management of manufacturing SMEs in Gorontalo City.

3.2. Population and Sample

The research population was selected from a sampling involving all registered manufacturing industries in Gorontalo Province. The said province is located in the center of the northern peninsula of the island of Sulawesi, Indonesia, which is considered one of the most developing countries in the world. Gorontalo is also the home of numerous SMEs that offer products that have been able to penetrate the national market and foreign markets and have the potential to be developed, including the Gorontalo “karawo,” or traditional embroidered handicraft industry, which has become one of the regional icons that have the potential to be developed (Diskoperidag, 2018). By looking at the claim, this study decided to focus on manufacturers of food and beverages, clothing, handicrafts, the chemical industry, materials (including wooden furniture), metal, and electronics. Nonprobability sampling was applied as the sampling technique. The sample was selected from a cluster sample, where all units of analysis were grouped; the sample selection was carried out purposively. As many as 200 questionnaires were distributed to the research site's owners or management of manufacturing SMEs. Only 185 out of all questionnaires were returned, and 150 were used. The sample size was determined by considering the conditions that must be met using SEM. This involves a sample range of 100-200 with a minimum of five times the total indicators and a maximum of 10 times the total indicators (Hair & Rolph, 2000). Since this research consisted of 12 indicators, the minimum and maximum sample sizes are 60 and 120, respectively. SEM research should consist of at least 100 respondents (Ferdinand, 2013). The total sample size of the present work was 150. The variables used in this study are entrepreneurial orientation, company innovation, and the performance of manufacturing SMEs.

3.3. Data Collection

The data in this study comprised primary and secondary data. Questionnaires, interviews, and direct observation were used to collect the primary data from the owners or management of manufacturing SMEs. These
questionnaires contained questions and statements graded using a Likert scale, which consists of five statements scaled from one to five, and each statement is worth one point. The questionnaire is constructed based on market and entrepreneurial orientations and the innovation of the company. As for the performance of manufacturing SMEs, it is scaled based on the performance level of each SME. The secondary data were retrieved from the Department of Industry and Trade and Statistics Indonesia in the province of Gorontalo.

### 3.4. Defining Operational Variables

The variables of the study are as follows: (a) Entrepreneurial orientation: This variable refers to the capabilities of manufacturing SMEs to act proactively, increase motivation, instill risk-taking qualities, and promote determination to attain business development goals. (b) Innovation in the company: This variable indicates how the SMEs continuously reform and refine the industry through innovation in technology, management, marketing, and products for better performance. (c) Performance of manufacturing SMEs: This variable represents the outputs of the activities of the SMEs in one period, which are measured by the total profits, sales volumes, calculation of market share, and level of productivity of the products.

### 3.5. Data Analysis

All data were examined using structural equation modeling, henceforth SEM. This method determines the causal relationships between the latent variables within a structural equation. The analysis and interpretation of the survey data, as well as hypothesis testing, were carried out using several models, including descriptive analysis, measurement testing, overall testing, structural testing, and testing of the relationship between observed variables. Relationships among the analyzed variables were investigated using a structural model based on the following reduced form equation (Equation 1b-2b).

\[ Y_1 = \alpha_0 + \alpha_1X_1 + \alpha_2X_2 + \varepsilon_1 \]  
\[ Y_2 = \theta_0 + \theta_1Y_1 + \theta_2X_1 + \theta_3X_2 + \mu_2 \]

### 4. RESULTS

The results reveal information from 150 respondents, i.e., the owners or management of manufacturing SMEs, which are grouped according to their age, gender, marital status, race, and educational level. The characteristics of the respondents are also classified based on the information about the business, such as experience, number of workforces, business permit, background of the company, marketing of the products, market target, marketing methods, development of the product, constraints, training, sales turnover, and cost per production. The percentages of SMEs in Gorontalo in 2017 are presented in the following Figure 2.

![Figure 2. Percentages of micro industries based on their categories in Gorontalo Province, 2018.](image_url)

Source: Statistic Indonesia, Gorontalo, 2018.
It is shown that the food industry dominates 44% of the overall SMEs in Gorontalo, while metal and electronic commerce are the opposite, with a percentage of 4%. The validity of the indicator is seen from its p-Value; if the value is less than 0.05, the indicators forming the entrepreneurial orientation are significant. Provided in Table 1 are the results of the test on the variable of market orientation.

### Table 1. Evaluation results of the variable of entrepreneurial orientation.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Loading factor (λ)</th>
<th>C.R</th>
<th>P-value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proactive</td>
<td>0.552</td>
<td>1.943</td>
<td>0.012</td>
<td>Significant</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.513</td>
<td>2.206</td>
<td>0.027</td>
<td>Significant</td>
</tr>
<tr>
<td>Risk-taker</td>
<td>0.184</td>
<td>1.376</td>
<td>0.018</td>
<td>Significant</td>
</tr>
<tr>
<td>Target</td>
<td>0.341</td>
<td></td>
<td></td>
<td>Significant</td>
</tr>
</tbody>
</table>

From the above table, the p-Value of all indicators is below 0.05. This result clarifies that the four indicators are valid and significant. The indicator with the highest loading factor value is proactive, measuring 0.552, and the lowest indicator is risk-taker, with 0.184.

The latent variable of innovation in the company is measured using four indicators: technology innovation, managerial innovation, marketing innovation, and product innovation. The overall accuracy of the company’s innovation variable is in line with the goodness-of-fit test result. The validity of the indicator is seen from its p-Value; if the value is less than 0.05, the company’s innovation indicators are significant. Table 2 provides the results of the test on the variable of innovation in the company.

Based on the empirical model developed in this study, it is possible to examine the proposed hypothesis by testing the path coefficient on the structural equation model. The results of the analysis are shown by a direct and indirect relationship between the exogenous variable of entrepreneurial orientation and the endogenous variable of corporate innovation and the performance of manufacturing SMEs. This research hypothesis can be accepted or refuted based on statistical testing with a standard Critical Ratio (CR) value or t-count value of ≥ 1.98 and a p-value ≤ 0.05. According to the hypothesis 1 test, the coefficient of direct influence of the entrepreneurial orientation variable on company innovation is 0.200 with a C.R. value of 2.271 and a probability of 0.014. It suggests that entrepreneurial orientation contributes to the innovation of a business. The CR (t-count) value was 2.271, with a significance of = 0.014 ≤ 0.05. Thus, hypothesis 1, stating that entrepreneurial orientation impacts company innovation, can be accepted.

The direct influence of the entrepreneurial orientation variable on company innovation is 0.200, with a C.R. value of 2.271 and a probability of 0.014. This suggests that entrepreneurial orientation contributes to the innovation of a business. In other words, if there is an increase in entrepreneurial orientation, company innovation will also improve, assuming other contributing factors to the size of the company’s innovation are constant. The CR (t-count) value of 2.271 with a significance of 0.014 (smaller than 0.05) signifies that entrepreneurial orientation impacts company innovation.

Entrepreneurial orientation encompasses four indicators: proactiveness, motivation, risk-taking, and the need for achievement. According to the hypothesis 2 test, the direct influence of the entrepreneurial orientation variable on company innovation is 1.298, with a CR value of 2.629 and a probability of 0.009. This suggests that entrepreneurial orientation contributes to the performance of manufacturing SMEs. The CR (t-count) value was 2.629, with a significance of = 0.009 ≤ 0.05. Simply put, hypothesis 2, stating that entrepreneurial orientation is impactful on company innovation, can be accepted.

The direct influence of the entrepreneurial orientation variable on manufacturing SMEs’ performance is 1.298, with a C.R. value of 2.629 and a probability of 0.009. Such evidence confirms that entrepreneurial orientation contributes to the performance of manufacturing SMEs. From this finding, an increase in entrepreneurial orientation will be followed by an improvement in manufacturing SMEs, assuming other contributing factors to the
size of the company’s innovation are constant. The CR (t-count) value of 2.629 with a significance of 0.009 (smaller than 0.05) signifies that entrepreneurial orientation impacts manufacturing SMEs’ performance.

According to the hypothesis 3 test, the direct influence of the entrepreneurial orientation variable on manufacturing SMEs’ performance is 0.056, with a CR value of 0.187 and a probability of 0.252. This finding reveals that innovation in the company is not significant to the performance of the SMEs. The CR (t-count) value was 0.187, with a significance of $= 0.252 \leq 0.05$. To put it another way, Hypothesis 3, stating that entrepreneurial orientation is impactful on company innovation, is refuted. Based on the results of testing Hypothesis 3, the indirect effect of entrepreneurial orientation on the performance of manufacturing SMEs through corporate innovation indicates that entrepreneurial orientation has a significant influence through corporate innovation of 0.073.

The company’s innovation factor has a direct influence of 0.056 on the performance of manufacturing SMEs. The associated critical ratio (C.R.) value is 0.187, and the probability is 0.252. These findings collectively indicate that innovation within the company does not hold significant importance for the performance of SMEs. Moreover, this result resonates with the C.R. (t-count) value of 0.187 with a significance of 0.252 (smaller than 0.05). Consequently, the relationship between the influences of corporate innovation and the performance of manufacturing SMEs is positive but not significant.

### Table 2. Evaluation results of the variable of innovation in the company.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Loading factor ($\lambda$)</th>
<th>C.R</th>
<th>P-value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proactive</td>
<td>0.552</td>
<td>1.943</td>
<td>0.012</td>
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<tr>
<td>Motivation</td>
<td>0.513</td>
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<tr>
<td>Target</td>
<td>0.341</td>
<td></td>
<td></td>
<td>Significant</td>
</tr>
</tbody>
</table>

From the above table, the p-Value of all indicators is below 0.05. This result clarifies that the four indicators are valid and significant. The indicator with the highest loading factor value is proactive, measuring 0.552, and the lowest indicator is risk-taker, with 0.184.

The latent variable of innovation in the company is measured using four indicators: technology innovation, managerial innovation, marketing innovation, and product innovation. The overall accuracy of the company’s innovation variable is in line with the goodness-of-fit test result. The validity of the indicator is seen from its p-Value; if the value is less than 0.05, the company’s innovation indicators are significant. Table 2 provides the results of the test on the variable of innovation in the company.

The direct influence of the entrepreneurial orientation variable on company innovation is 0.200, with a CR value of 2.271 and a probability of 0.014. This suggests that entrepreneurial orientation contributes to the innovation of a business. In other words, if there is an increase in entrepreneurial orientation, company innovation will also improve, assuming other contributing factors to the size of the company’s innovation are constant. The CR (t-count) value of 2.271 with a significance of 0.014 (smaller than 0.05) signifies that entrepreneurial orientation impacts company innovation.

### Table 3. Evaluation results of the variable of innovation in the company.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Loading factor ($\lambda$)</th>
<th>C.R</th>
<th>P-value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology innovation</td>
<td>0.448</td>
<td>3.425</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Managerial innovation</td>
<td>0.494</td>
<td>3.103</td>
<td>0.002</td>
<td>Significant</td>
</tr>
<tr>
<td>Marketing innovation</td>
<td>0.487</td>
<td>3.042</td>
<td>0.002</td>
<td>Significant</td>
</tr>
<tr>
<td>Product innovation</td>
<td>0.471</td>
<td></td>
<td></td>
<td>Significant</td>
</tr>
</tbody>
</table>

Table 3 confirms that the p-Value of all indicators is below 0.05. The indicator with the highest loading factor value is managerial innovation, measuring 0.494, and the lowest indicator is technology innovation, with 0.448. The validity of the indicator is seen from its p-value; if the value is less than 0.05, the indicators of the performance of
manufacturing SMEs are significant. The results of the test on the variable of performance for the SMEs are provided in Table 4.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Loading factor (λ)</th>
<th>C.R</th>
<th>P-value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total profits</td>
<td>0.779</td>
<td>10.160</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Sales volume</td>
<td>0.827</td>
<td>10.450</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Market share volume</td>
<td>0.803</td>
<td>10.845</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Productivity of the products</td>
<td>0.832</td>
<td></td>
<td></td>
<td>Significant</td>
</tr>
</tbody>
</table>

Table 4 confirms that the p-value of all indicators is less than 0.05. In other words, the four indicators are valid and significant. The indicator with the highest loading factor value is the productivity of the product, measuring 0.832, and the lowest indicator is total profits, with 0.779. The correlation is considered significant if the C.R. value (t-count) ≥ 1.98 or the p-value ≤ 0.05; the correlation is provided in Table 5.

Table 5 reveals one correlation with a CR value below 1.98 and a p-value greater than 0.05, which is the correlation between the company's innovation variable and the performance of manufacturing SMEs (CR value of 0.187 and p-value of 0.252). In other words, the correlation between these variables is not significant. The CR and p-value of other correlations between variables fulfill the criteria (CR ≥ 1.98 and p-value ≤ 0.05).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Loading factor</th>
<th>S.E.</th>
<th>C.R</th>
<th>P-value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial innovation in company orientation</td>
<td>0.200</td>
<td>0.245</td>
<td>2.271</td>
<td>0.014</td>
<td>Significant</td>
</tr>
<tr>
<td>Performance of entrepreneurial manufacturing SMEs orientation</td>
<td>1.298</td>
<td>0.494</td>
<td>2.629</td>
<td>0.009</td>
<td>Significant</td>
</tr>
<tr>
<td>Performance of innovation in manufacturing SMEs company</td>
<td>0.056</td>
<td>0.300</td>
<td>0.187</td>
<td>0.252</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

5. DISCUSSION

5.1. The Impact of Entrepreneurial Orientation on Innovation in a Company

The result of the variable analysis shows that entrepreneurial orientation positively and significantly affected innovation in the company. Entrepreneurial orientation encompasses several indicators: proactiveness, motivation, risk-taking, and the need for achievement. It implies that the entrepreneurial orientation is central to innovation in the company, especially in manufacturing SMEs in Gorontalo City. The better the entrepreneurial orientation, the more efforts the owners or management of the SMEs make to create innovation, and vice versa.

Manahera, Silcyljeova, and Tawas (2018) emphasize the significance of entrepreneurial orientation in driving product innovation among yellow rice businesses in Manado. Their study reveals a positive relationship between entrepreneurial orientation and product innovation. Al-Swidi and Al-Hosam (2012) support this perspective by finding that entrepreneurial orientation plays a crucial role in determining a company's innovation and subsequently improving its organizational performance. Similarly, Hassim et al. (2011) affirm the positive impact of entrepreneurial orientation on business innovation, leading to enhanced performance. These findings highlight the influential role of entrepreneurial orientation in driving innovation within a company.

However, the findings of Haroon Hafeez et al. (2012) contradict this notion, suggesting no significant correlation between entrepreneurial orientation and innovation in the company. Regarding the present study, the results indicate that the entrepreneurial orientation of owners or management in manufacturing SMEs falls within the moderate category. Consequently, SMEs are advised to focus on specific factors such as being proactive, motivated, risk-takers, and driven by the need for achievement in order to stimulate innovation. Notably, the most significant indicators identified are the proactive and motivation variables.
5.2. The Impact of Entrepreneurial Orientation on SMEs’ Performance

The result shows that the entrepreneurial orientation positively and significantly affected the company’s innovation and manufacturing SMEs’ performance. This notion suggests the significance of entrepreneurial orientation for the performance of manufacturing SMEs in Gorontalo City. The better the entrepreneurial orientation, the better the quality of the performance of the SMEs, and vice versa.

The above finding resonates with the one seen by Haroon Hafeez et al. (2012), who found that entrepreneurial orientation has a causal relationship with the branding and performance of SMEs. Idar and Rosli (2012) point out that entrepreneurial orientation is aimed at retaining competitive advantages, and SMEs are obliged to boost their performance. The result of this research is also in line with several studies (Al-Swidi & Al-Hosam, 2012; Awang et al., 2009; Hassim et al., 2011).

The findings derived from the hypothesis testing demonstrate that there exists a statistically significant and positive relationship between entrepreneurial approach and the performance of manufacturing small and medium-sized enterprises (SMEs), including a variety of firms situated in Gorontalo City. There exists a positive correlation between the level of entrepreneurial orientation and the quality of performance exhibited by owners or managers of manufacturing small and medium-sized enterprises (SMEs). Conversely, a decrease in entrepreneurial orientation is associated with a decline in performance quality. Huda et al. (2020) opine that entrepreneurial orientation improves SMEs’ performance and financial management (Henelya & Wijaya, 2020; Santhi & Yuniar, 2020). Ibrahim and Abu (2020) assert that entrepreneurial orientation, innovation, proactiveness, risk-taking attitudes, and competitiveness positively and significantly determine a company’s performance. Evangelista and Mac (2016) argue that the government should take part in improving SMEs’ performance by instilling the concept of active learners among the management of the businesses. This can be done through workshops encompassing articulation and knowledge codification approaches that boost exports, emphasizing long-term benefits. Toms et al. (2020) state that the concept of time-based entrepreneurship aims to analyze the circumstances in which technical innovation, financial intermediation, and innovation distinguish historical combinations from entrepreneurial opportunities. This concept elaborates on two sources of innovation: technological innovation and financial innovation. It is revealed that there is a separate and concurrent influence of the financial process on entrepreneurial opportunities. Such an outcome depends on the timing and circumstances of the entrepreneurial institutional context.

This study finds that the entrepreneurial orientation of the owners or management of manufacturing SMEs is in the moderate category. For this reason, SMEs are urged to pay attention to several points, such as proactiveness, motivation, risk-taking, and the need for achievement to stimulate innovation. The most significant indicators are the proactive and motivation variables. Regarding the proactivity aspect, the management and owners of SMEs in Gorontalo are encouraged to seize the opportunity to develop their businesses. It can be done by conscientiously identifying factors leading to company improvement, participating in seminars, and creating innovative and positive changes.

On the other hand, the low influence of the entrepreneurial orientation indicator represents the desire to achieve, and the very low influence indicator represents the risk-taking preferences of SME managers in attaining short-term goals over long-term profits, ignoring profit and loss in decision-making. Such attitudes consider that competitors are not a challenge for the business. The source of belief in an opportunity prioritizes instinct over logical thinking based on valid information.

Through several entrepreneurship-based activities, entrepreneurs receive positive support from the government for MSME actors. Manufacturing SMEs significantly contribute to the economy of Gorontalo Province, especially in supporting the government’s strategic program or people-based economic development. Furthermore, the government must encourage SMEs not to depend on financial assistance from banks, cooperatives, and moneylenders with high interest rates. Dissemination of business management concepts by the government can help business actors develop their businesses in the future.
The most significant indicators are the proactive and motivational variables. Regarding the proactivity aspect, the management and owners of SMEs in Gorontalo are encouraged to seize the opportunity to develop their businesses. Consciously identifying factors that promote business improvement, taking part in seminars, and bringing about innovation and constructive change are all ways to achieve this.

5.3. The Impact of Innovation on SMEs’ Performance

This study finds that innovation in the company is not significant to SMEs’ performance. These indicators include technology, managerial, marketing, and product innovation. This study finds that innovation is not significant to SMEs’ performance. An innovative company does not ensure the quality of its work. Such a notion suggests that innovation in business is not among the factors contributing to the capabilities of SMEs in Gorontalo City.

The result of this study showing the insignificant impact of innovation on the SMEs’ performance echoes the notion seen in a study by Man (2009), which examines the correlation between distinctive abilities, change, and types of strategies of manufacturing SMEs in Malaysia. The study reports no significant relationship between innovation and work performance. Similarly, SMEs’ performance does not significantly correlate with their distinctive abilities and types of strategies. Manahera et al. (2018) assert that product innovation has a partial, negative influence on marketing performance.

However, the current study’s finding contradicts the results of Utaminingsih (2016) and Kiran, Majumdar, and Kishore (2012), which report that innovation positively and significantly influences marketing performance. Pattipeilohy (2018) opines that the development process represents product innovation in the food industry by adding more variations in the supply of meals and vegetables; this approach can enhance marketing performance.

The findings of this study that company innovation does not significantly affect the performance of manufacturing SMEs are different from the ones seen in Gunday (2011), suggesting that companies should emphasize innovation due to its contribution to sustainable competitiveness. Iandolo and Ferragina (2019) agree that innovation is central to business performance. The innovation strategy carried out continuously in foreign markets is related to exporting companies’ ability to obtain information from abroad (Veglio & Zucchella, 2015). Innovation is the driver of the internationalization process of traditional industrial SMEs, especially design innovation (Chang & Webster, 2019). There is a positive and significant correlation between government networks and exports. Exporting SMEs plays an essential role in business. At the same time, government networks are more capable of providing resources and information, meaning that government networks are more effective for SMEs in resource provision in the context of global market value (Love & Roper, 2015). A clear synergy between innovation and export performance is essential to improving the performance of SMEs. It explains the importance of potential external supporting factors like innovation and exports for the existence of SME operations. Moreover, Nguyen-Van and Chang (2020) argue that complex innovation development boosts the performance of businesses. Ode and Ayavoo (2020) and Huda et al. (2020) add that the significance of innovation should be balanced with the development of knowledge and management.

The result of this study shows that innovation does not contribute to the performance of manufacturing SMEs in Gorontalo due to a number of factors. First, indicators to measure the variable of innovation are not yet utilized by manufacturing SMEs. Those indicators involve technological, managerial, marketing, and product innovation. The empirical findings have shown that SMEs lack technological innovation in increasing production capacity. Such a situation blames the inability to adapt to new production methods on inefficient production costs. Second, SMEs have yet to satisfy the market’s needs. Inefficient product development processes are somewhat lacking, and the company is unable to enter market segments. Third, efforts attempted by the marketing department of the company, such as increasing distribution channels (branches, agents, and distributors), are not at their maximum. The companies are also unsuccessful in creating changes to retain customers.
Another finding of this study shows that innovation does not contribute to the performance of manufacturing SMEs in Gorontalo. It is revealed that the SMEs' owners or managers consider innovation unnecessary as they need to retain traditional habits. They are easily pleased by their achievement, which constrains them from moving forward to create breakthroughs and new concepts in developing the products and improving their qualities.

Poor innovation indicators for manufacturing SMEs in Gorontalo City involve product innovation and technological innovation. Owners and managers of manufacturing SMEs in Gorontalo City did not manage to create a breakthrough in products that do not meet recent market development trends. Production capacities are also low, and the production methods are deemed orthodox.

5.4. The Impact of Entrepreneurial Orientation through Innovation in Company

This research reveals that entrepreneurial orientation and innovation in the company positively and significantly affect the performance of manufacturing SMEs. In other words, improvement in the entrepreneurial orientation is followed by improvement in the innovative movements of the company. This situation will, in turn, enhance the accomplishments of manufacturing SMEs. The results of this study resonate with the idea proposed by Awang et al. (2009). They argue that autonomy and innovation in entrepreneurial orientation significantly and positively correlate with work performance. The result seen in a study by Silviasih and Denny (2016) on garment SMEs also agrees with this notion. Entrepreneurial orientations are the capabilities and resources that instill competitive advantages and quality performance in a business. Hassim et al. (2011) and Wedayanti (2016) explain that business performance is positively influenced by innovation and entrepreneurial orientation. SMEs entrepreneurs will be proactive in investigating the market opportunity. Creativity and product innovation simultaneously positively and significantly influence SMEs' business performance (Kalil & Aenurohman, 2020; Santhi & Yuniar, 2020). Moreover, entrepreneurial orientation and product innovation have a positive and significant impact on the financial performance of SMEs (Galindo-Martín et al., 2019), while innovation positively affects economic growth. Furthermore, there is a direct positive relationship between entrepreneurship and economic growth. Entrepreneurial activities are crucial in introducing and developing innovation activities and boosting economic growth. Innovation also has a positive relationship with the development of business actors. Toms et al. (2020) say that the idea of time-based entrepreneurship is meant to look at how technical innovation, financial intermediation, and innovation can separate historical combinations from entrepreneurial opportunities. This concept elaborates on two sources of innovation: technological and financial. It is revealed that there is a separate and concurrent influence of the financial process on entrepreneurial opportunities. Such an outcome depends on the timing and circumstances of the entrepreneurial institutional context.

6. CONCLUSIONS

6.1. Conclusion

The outcome of the variable analysis demonstrates that entrepreneurial orientation positively and significantly affected innovation in the company, demonstrating that innovation improves the quality of entrepreneurial orientation. Manufacturing SMEs in Gorontalo have proactively seized the opportunities to create positive changes and actively participated in business training. In addition, it has been observed that there is a positive and substantial relationship between entrepreneurial orientation and the success of small and medium-sized enterprises (SMEs) operating in the manufacturing sector. This suggests that there is a positive correlation between the quality of orientation and the work achievement of small and medium-sized enterprises (SMEs). The concept of entrepreneurial orientation is one of the variables that requires significant attention. During the implementation of the orientation, it is important to evaluate a range of attributes, including proactivity, motivation, and a willingness to take risks. It is worth noting that the innovation in the company is not significant to the performance of SMEs. This finding implies that the management or owners of manufacturing SMEs in Gorontalo City have yet to
implement innovative ideas in terms of technology, management, marketing, and products. Furthermore, the entrepreneurial orientation of the company through the thought-provoking measures positively and significantly influences the performance of manufacturing SMEs, which leads to better work accomplishment.

It is implied that the concepts of entrepreneurial orientation and company innovation can be applied to improve the performance of small and medium manufacturing enterprises (SMEs), especially in Gorontalo City. The entrepreneurial orientation, which encompasses an attitude towards using business opportunities, high motivation, risk-taking attitudes, and a desire for achievement, will help the owners and managers of manufacturing SMEs improve their performance. Innovation in a company comprising technology, managerial, marketing, and product innovation contributes indirectly to manufacturing SMEs' performance. It is based on the refuted hypothesis stated in the research findings. A proactive attitude, high motivation, risk-taking attitudes, and intentions to achieve higher will cultivate innovative thinking among owners and managers of SMEs. Such innovation encompasses several aspects, e.g., technology, management, marketing, and product, by applying new production methods and controlling production approaches to develop innovative products that target all segments of buyers.

6.2. Implication

The practical implications of the present work provide the Ministry of Cooperatives and SME Development and local governments with information that serves as a basis for decision-makers in the development of personnel involved in manufacturing SMEs. Furthermore, the research results can assist the banking sector in determining policies on SMEs' development that refer to entrepreneurial orientation and company innovation. It encourages small and medium manufacturing enterprises to progress and develop. Also, this research serves as input for manufacturing SMEs to improve their business performance and achieve sustainable and competitive competitiveness in global markets.

The present work still has some limitations; thus, it provides opportunities for further research. First, the scope of the study is limited to SMEs in nine sub-districts in Gorontalo City. Second, the cross-sectional method is not suited for in-depth analysis of various aspects of the relationship and influence of variables in the present work. Third, the research instrument employed a Likert scale. Fourth, the data required for industrial development information or profiles of SMEs in Gorontalo is not yet complete at the cooperative, industry, and trade offices. This condition leads to obstacles in describing the development of manufacturing SMEs at the research site. For further research, it is recommended to use other variables that impact the performance of manufacturing SMEs, such as environmental competitiveness (Chang & Webster, 2019) and knowledge development and training on cross-cultural skills (Selvarajah et al., 2019). Identifying more contributing factors is significant in formulating strategies capable of boosting SMEs' performance.

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REFERENCES


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