

## Research Article

# Impact of entrepreneurial orientation on business performance: Analysis of small-medium sized corn enterprises

Areyne Christi<sup>1</sup>, Urbanus Sukri<sup>2</sup>, Ester Widyaningtyas<sup>1</sup>, Hari Budiwaluyo<sup>1</sup>

1. Sekolah Tinggi Teologi Excelsius Surabaya, Surabaya, Indonesia; 2. Independent researcher

This article aims to examine the impact of entrepreneurial orientation on the performance of small and medium enterprises in the corn business to encourage the improvement of the performance of SMEs in East Java. This study uses an entrepreneurial management science approach, especially for research on the effect of entrepreneurial orientation with dimensions of autonomy, innovation, proactiveness, risk-taking, and competitive aggressiveness on company performance with measurements of financial perspective, market perspective, and quality perspective. This study uses a cross-sectional method approach. The results showed that entrepreneurial orientation affected company performance. Owner involvement in the business can improve business performances.

**Corresponding authors:** Areyne Christi, [areynechristi@sttexcelsius.ac.id](mailto:areynechristi@sttexcelsius.ac.id); Ester Widyaningtyas, [esterwidiyaningtyas@sttexcelsius.ac.id](mailto:esterwidiyaningtyas@sttexcelsius.ac.id); Hari Budiwaluyo, [Haribudi@sttexcelsius.ac.id](mailto:Haribudi@sttexcelsius.ac.id)

## 1. Introduction

Agriculture is a sector that is relied upon because it has a role as a food provider for the community, helps eradicate poverty due to employment opportunities, and acts as a source of community income. In line with the research conducted by (Magar, Pun, Pandit, & Rola-Rubzen, 2021) on the path to building resilience to the Covid-19 pandemic in Nepal, he also believes that revitalizing the agricultural sector needs to be carried out to build a sustainable and resilient economy in creating fields. Employment and increased agricultural productivity. Likewise, in Indonesia, during the current Covid-19 pandemic, the agricultural sector is one sector that can survive and continue to grow as BPS data shows that of several

leading sectors in Indonesia, only the farm industry experienced positive growth of 2.15% compared to the previous year.

Corn is a food crop commodity that plays a vital role for Indonesia and is the second-largest carbohydrate producer after rice and wheat. In addition, corn has four multipurpose functions, including food, feed, fuel, and industrial raw materials (fiber). Corn is used as a source of carbohydrates, dinner, and industrial raw materials. It is proven that 60% of animal feed rations, especially poultry, are corn (Kihanya, 2013). The demand for corn as raw material for animal feed continues to increase. Apart from the relatively affordable price, the use of corn for dinner is also due to its high calorie and protein content.

SME entrepreneurs mainly operate corn cultivation. SME development is pursued by three central policies: creating a conducive climate, increasing access to productive resources, and developing entrepreneurship.

The increase in numbers to provide business opportunities to the community is still a significant problem in developing Micro, Small, and Medium Enterprises (MSMEs). However, apart from that, there are still other problems, such as how to increase competitiveness at the local, national, regional, and global levels, so that trade and investment liberalization can be embedded and the benefits can be enjoyed. This is also part of the debate in the MSME forum at the Asia Pacific Economic Council (APEC) cooperation regarding the involvement of new business units broadly for citizens as members of APEC, as well as views on the necessity of collaboration between economics and engineering (ECOTECH) proposed by developing countries. To increase the competitiveness of APEC member industries in global competition.

Strong entrepreneurs can create a firm business world to accelerate the increase in competitiveness. Therefore, the development of entrepreneurship is about quantity and quality. The quality of entrepreneurship will encourage business actors to grow and develop consistently in any environmental conditions through the right strategy to achieve the best performance. Two main conditions can encourage SMEs to compete, namely, first, an improvement in the internal environment of SMEs, and secondly, the creation of a conducive external environment (Adiningsih, Tejasukmana, & Khomarudin, 2006).

In the end, innovation is the basis of the strength and resilience of a company to develop. Innovation is the keyword for SMEs to solve problems and achieve better goals and encourage vital SMEs.

Even the successful implementation of entrepreneurial orientation in SMEs has enabled applying this concept to giant companies (Guth & Ginsberg, 1990). This view is in line with the recommendations from the discussion between the Asia Foundation and the Indonesia Forum Forum (1998), which essentially emphasizes that the development of small and medium enterprises should be directed more towards the formation of their entrepreneurial spirit and orientation, rather than capital assistance and technical skills as has been carried out by the government. Therefore, it is necessary to study the effect of entrepreneurial orientation on company performance in the context of SMEs in Indonesia.

Various evidence of the significant influence of entrepreneurial orientation on performance (Magar et al., 2021); (G Tom Lumpkin & Dess, 1996); and (Lyon et al., 2000). According to (Lyon et al., 2000), studies on entrepreneurial orientation are essential. Even (Wang, 2008) explains entrepreneurial orientation is a primary key in a company's success. This shows that the foundation in any entrepreneurial activity is entrepreneurial orientation.

This research is mainly aimed at SMEs. Small and medium enterprises as a solution to alleviating unemployment and poverty. The high number of unemployed in Indonesia and the need for around 38.33 million new entrepreneurs to strengthen Indonesia's competitiveness in the era of global competition are other real challenges that need to be solved simultaneously by moving unemployed workers to the field, namely becoming new entrepreneurs.

## **2. Theoretical Review**

### ***2.1. Entrepreneurial Orientation Theory***

According to (George Thomas Lumpkin & Dess, 2015) entrepreneurial orientation theory is a term used to discuss the mindset of companies or entrepreneurs in pursuing new business opportunities that are useful in researching entrepreneurial activities. Meanwhile, according to (Anderson et al., 2014), entrepreneurial orientation is entrepreneurial behavior that is proactive and innovative and managerial willingness to take opportunities without definite results. Companies can explore new creative ideas proactively ahead of the competition to anticipate future demand.

Five dimensions, including: can measure entrepreneurial orientation

### *2.1.1. Autonomy*

According to (G Tom Lumpkin & Dess, 1996), autonomy is intended to act independently of an individual or group of people to advance an idea or vision and to the end. Therefore, the autonomy dimension is an integral part of entrepreneurial orientation. (Burgelman, 1983) confirms this and says that autonomy is an organizational ability and tendency to achieve independence and self-centeredness in thinking and acting. A culture that encourages such behavior is present among individuals or teams in an organization.

### *2.1.2. Innovation*

(Colaço, 2015) argues that innovation ability is the ability to use technology, personnel, or processes to be more effective. In his research, he describes five dimensions of innovation, including:

1. Product innovation
2. Process innovation.
3. Administrative innovation, namely the company's ability to complete and implement new work methods.
4. Marketing innovation, the company's ability to innovate in pricing and promotion methods.
5. Service innovation.

### *2.1.3. Proactive*

Proactive is a perspective in looking for opportunities and having insight for future needs. (G Tom Lumpkin & Dess, 1996). According to (Zhao & Smallbone, 2019), proactiveness is the most essential characteristic of entrepreneurship between opportunity recognition and business start-up. As part of the entrepreneurial orientation dimension, proactive orientation reflects a new venture strategy that aims to outpace competitors (Gao, Ge, Lang, & Xu, 2018).

### *2.1.4. Risk-Taking*

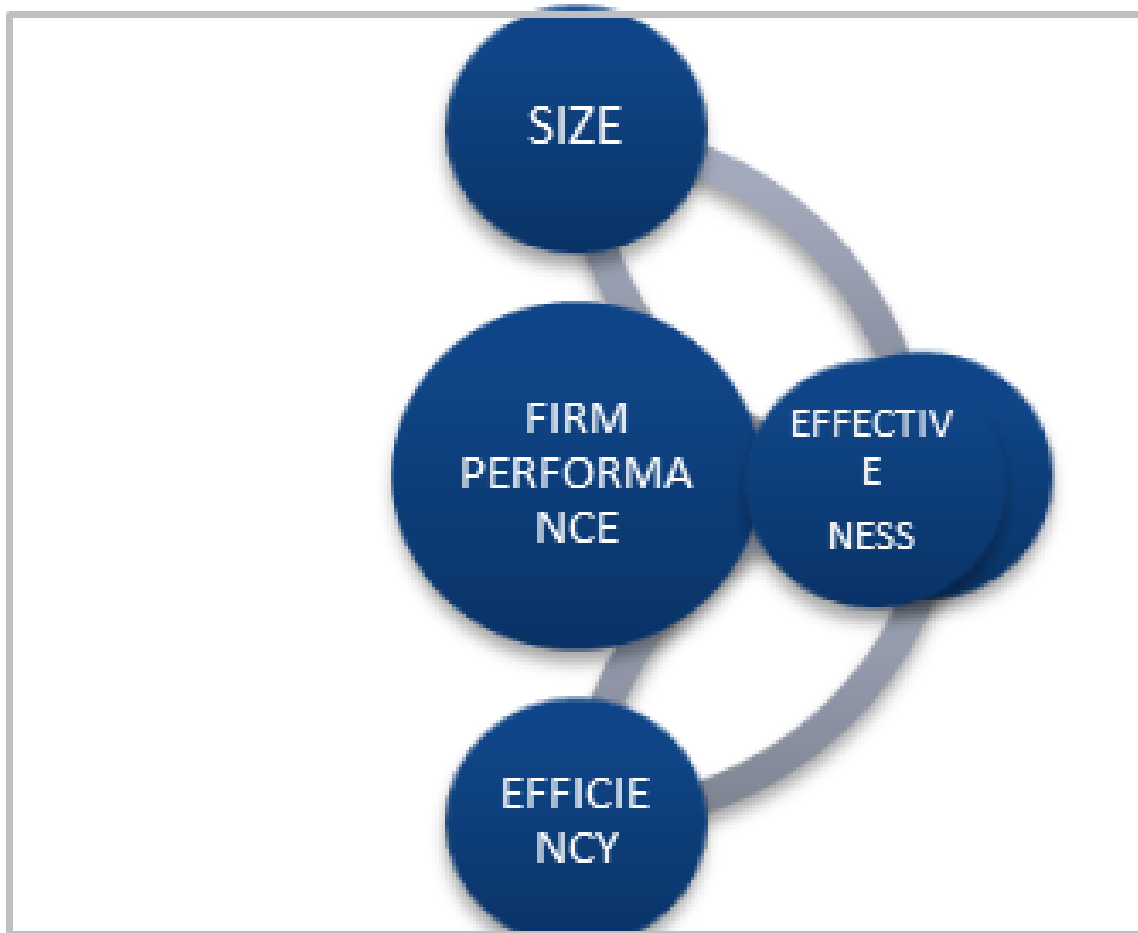
(George Thomas Lumpkin & Dess, 2015) explain that risk-taking involves bold actions in decision-making, especially related to disputable matters, such as borrowing large amounts of debt and/or committing significant resources to obtain high returns by seizing opportunities in the future. Market. Taking risks is bold because there is no certainty about potential returns (Basco, Hernández-Perlines, & Rodríguez-García, 2020) Competitive Aggressiveness

According to (G Tom Lumpkin & Dess, 1996), the strength of a company is that it challenges its opponents to improve its position while outperforming competitors in the market.

## 2.2. Company Performance Theory

According to (Bernardin, 2013), performance is defined as a record of the results produced on specific job functions or activities over a certain period. Meanwhile, according to (Hasibuan & Hasibuan, 2016), the result of a process that involves and is measured over a certain period based on agreements and conditions set by the company is called performance.

The following are some dimensions related to previous researchers' performance measurement: business performance by measuring turnover, net profit/loss, success through new products, and observations by the company.



**Picture 1.** Company Performance Dimension

The company's performance appraisal is divided into three dimensions: quality, efficiency, and time. Performance appraisal is a structured formal system for assessing and measuring things related to behavior and work, including the level of attendance. This assessment aims to determine employee productivity and see whether the employee has high performance and can work effectively in the future (Schuler, Jackson, Jackofsky, & Slocum Jr, 1996).

According to (Sulistiyan, 2018), the purpose of performance appraisal is divided into four, namely to find out the goals and objectives of management and employees, to motivate employees to improve and improve their performance, to distribute rewards from organizations/agencies in the form of salary increases/wages and promotions. Fairness, and to conduct personnel management research.

The purpose of the assessment of the company's performance, according to (Munawir, 2000), is as follows:

1. Determine the level of liquidity,
2. Knowing the level of solvency
3. Knowing the level of profitability
4. Knowing the level of business stability,

### **3. Methodology**

This study uses an entrepreneurial management science approach, especially for research on the effect of entrepreneurial orientation with dimensions of autonomy, innovation, proactiveness, risk-taking, and competitive aggressiveness on company performance with measurements of financial perspective, market perspective, and quality perspective. This study uses a cross-sectional method approach. According to (Notoatmodjo, Kasiman, & kintoko Rohadi, 2018), cross-sectional method research is a research design carried out using measurements or observations at the same time or at one time. The respondents of this study were the perpetrators of corn SMEs in East Java.

The population used in this research is all small and medium enterprises that manage corn in East Java, which is also the unit of research analysis. Snowball sampling was used for sample selection. The number of samples obtained from the results of snowball sampling includes as many as 47 units of observation (respondents) as a representative sample for this study.

Descriptive analysis is used to describe the entrepreneurial orientation and company performance. A descriptive analysis was performed using a frequency distribution table, which analyzed the trend of

respondents' responses. To get a conclusion on each variable and sub-variable, we used a continuum line approach with percentage-based calculations, which is compared between the actual score and the ideal score. Each indicator variable or subvariable answered by the respondent is divided into five alternative answers according to the ordinal scale. Each indicator is assigned an answer rating score from 1 to 5, with the interpretation of 1 = very low 2 = low 3 = average 4 = high 5 = very high

The respondent's answer score is then calculated on the average and the percentage. As for calculating the percentage score of respondents' answers, the formula used is as follows:

Actual score: total score of respondents' answers to variables and sub-variables

ideal score = statements in variable or sub-variable x highest score

% = (actual score/ideal score) multiplied by 100%

The percentage is then interpreted based on the interpretation of the mean score and percentage score according to Heir et al. (2010). The following is an interpretation table of the average score and percentage score as shown in Table 1 below:

Loading Factor	Interpretation	Average	Score Percentage	Interpretation
0,70 – 1,00	Very High	4,20 – 5,00	84% – 100%	Very High
0,40 – 0,70	High	3,40 – 4,19	68% – 84%	High
0,20 – 0,40	Low	2,60 – 3,39	52% – 68%	Average
0,00 – 0,20	Very Low	1,80 – 2,59	36% – 52%	Low
0,00	No Relationship	1,00 – 1,79	20% – 36%	Very Low

**Tabel 1.** Interpretasi Skor

## 4. Results and Discussion

### 4.1. Feedback on Entrepreneurship Orientation

The entrepreneurial orientation construct consists of 5 dimensions, namely (1) autonomy, (2) innovation, (3) proactiveness, (4) risk-taking, and (5) competitive aggressiveness. In Table 4.1 below, it can be seen

that the results of descriptive research indicate that the dimensions of entrepreneurial orientation are in the range of an average score of 3.43 and a percentage of 68.6%. This means that the entrepreneurial orientation of the corn business in East Java is relatively high.



Dimensions and Indicators	Average Score	Percentage	Interpretation
<b>Autonomy</b>	3,79	75,9%	Tall
Independence of ideas and actions	4,38	87,6%	Very high
Delegation authority & responsibility	4,28	85,6%	Very high
capability	3,64	72,8%	Tall
A new culture in the organization	2,87	57,4%	Enough
<b>Innovation</b>	1,99	39,8%	Low
New technology	1,32	26,4%	Very high
Product innovation	1,85	37%	Low
Innovation marketing	1,26	25,2%	Low
Process innovation	1,66	33,2%	Low
Management innovation	3,85	77%	Tall
<b>Proactive</b>	4,71	94,1%	Very high
Predictions	4,8	96%	Very high
Visionary leadership	4,91	98,2%	Very high
Sustainable environmental mapping	4,41	88,2%	Very high
<b>Risk-taking</b>	3,34	66,7%	enough
Understanding of uncertainty	4,13	82,6%	Tall
Courage to profit	1,47	29,4%	low
Courage to suffer loss	4,41	88,2%	Very high
<b>Competitive aggressiveness</b>	3,32	66,4%	enough
Introduction to competitor activities	4,72	94,4%	Very high
Reaction to competitor moves	3,86	77,2%	Tall
Promotion intensity and cost	1,38	27,6%	Low
<b>Entrepreneurial orientation average</b>	<b>3,43</b>	<b>68,6%</b>	<b>Tall</b>

**Table 2.** Entrepreneurial Orientation of Small Medium Enterprises for Corn Businesses in East Java

Based on Table 2, the average score and percentage of the first dimension of entrepreneurial orientation, namely autonomy and its indicators, are at a sufficient level. This is evidenced by the average score of 3.79 and the percentage of 75.9%. It is known from the results of interviews that some respondents have the idea to build and run a business independently without the help of other parties and can delegate authority and responsibility to subordinates according to their fields. This is evidenced by a high total score on indicators of independence of ideas and actions and a delegation of authority and responsibility to subordinates. The lowest score is on the new culture indicator in the organization because employees still have to adapt to the unique culture and rules in SMEs.

The second dimension of entrepreneurial orientation is innovation. The average score and percentage related to the risk-taking extent and its indicators are in a low category. This is indicated by the average score of 1.99 and 39.8%. Based on interviews, most of the corn businesses in East Java still use old and traditional technology; it is challenging to innovate both product, marketing, and process innovation. They only maximize their management skills. It can also be seen in the score recapitulation that these indicators are still relatively low. Only management innovation has the highest score from other hands.

The third dimension, which is proactive and its indicators, has an average of 4.71 and a percentage of 94.1%. This shows that the proactive dimension is in the very high category. The interview results show that the majority of respondents have visionary leadership and have future insight; they have predictions about future conditions based on analysis of previous data and have mapped a sustainable environment for the sustainability of their business.

The fourth dimension, namely risk-taking and its indicators, is high. This dimension has an average score of 3.34 and a percentage of 66.7%. The interviews stated that they understand the uncertainty of various factors that can affect business continuity from the interviews. However, they are still very afraid of taking big profits because big profits are usually obtained with big risks.

The fifth dimension of entrepreneurial orientation is competitive aggressiveness. The score and percentage of this dimension belong to the sufficient category. This is indicated by an average score of 3.32 and a percentage of 66.4%. The highest score is on the indicators of introduction and reaction to

competitor activities. The lowest score is on the indicators of intensity and promotion costs. Based on the results of interviews, respondents have made an introduction to competitor activities. They are quite responsive to competitors' activities by analyzing competitors' movements. However, they still limit the intensity and cost of promotions to reduce the company's operational costs. Their business promotion is still not optimal.

#### *4.2. Feedback on Company Performance*

The company's performance construct consists of 3 dimensions, namely (1) financial perspective, (2) market perspective, and (3) quality perspective. In Table 4.5 below, it can be seen that the results of descriptive research indicate that the dimensions of company performance are in the range of an average score of 2.97 and a percentage of 59.5%. This means that the company's performance in the corn business in East Java is quite adequate.

Dimensions and Indicators	Average score	Percentage	Interpretation
<b>Financial perspective</b>	2,63	52,7%	Low
Profit to income ratio	2,17	43,4%	Low
Cash flow from operations	2,77	55,4%	Low
Net profit	2,96	59,2%	Enough
ROI	2,74	54,8%	Enough
ROA	2,81	56,2%	enough
<i>Market Share</i>	2,55	51%	Low
Revenue growth	2,43	48,6%	Low
<b>Market perspective</b>	3,04	60,8%	enough
New product/service development	3,79	75,8%	Tall
Market development for an existing product	3,07	61,4%	enough
Newmarket development	2,34	46,8%	low
<b>Quality perspective</b>	3,25	65%	enough
Service quality as perceived by customers	4,26	85,2%	Very high
Capacity to develop a unique competitive profile	3,23	64,6%	enough
Investment in R&D aimed for innovation	2,28	45,6%	Low
<b>Average company performance</b>	2,97	59,5%	Enough

**Table 3.** Performance of Small Medium Enterprises for Corn Businesses in East Java

Based on Table 3, the average score and percentage of the first dimension of the company's performance, namely the financial perspective and its indicators, are in a low category. This is indicated by the average score of 2.63 and the percentage of 52.7%. It is known from the interviews the majority of respondents stated that the financial performance of their business is still low.

The second dimension of company performance is the market perspective. The average score of this dimension is 3.04, with a percentage of 60.8%, which means it is categorized as sufficient. The highest score on the market perspective dimension is on the new product development indicator. Meanwhile, the lowest score on this dimension is on the new market development indicator. Reinforced by the results of interviews, respondents stated that they always develop new products but still find it difficult to develop new markets.

The third dimension, namely the quality perspective and its indicators, are in the sufficient category. This is indicated by an average score of 3.25 and a percentage of 65%. The highest score of this dimension is on the service quality indicators perceived by consumers. At the same time, the lowest score is on the investment indicator in R&D for innovations. The results of the interview show that the majority of respondents have provided quality service following consumer desires. Respondents have served consumer needs well. However, they have not invested in conducting further research and development to carry out innovations from the company.

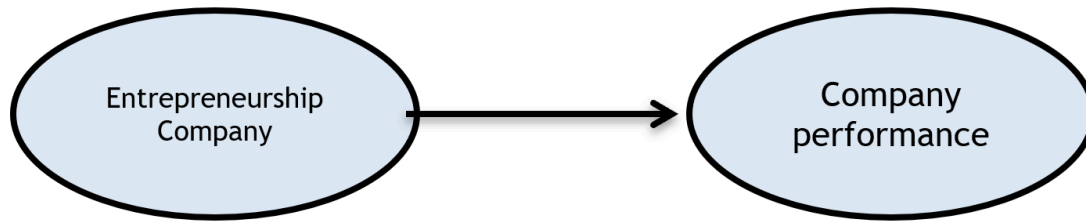
Based on Table 3, the t-count value of the entrepreneurial orientation variable is 1.974, which is greater than the t-critical or t-table with a significance value of = 0.05 and falls in the acceptance area. Based on the t-count in table 4 3, H0 is rejected, and H1 is accepted so that the influence of the entrepreneurial orientation variable on company performance is significantly positive. The coefficient value of 0.324 means that entrepreneurial orientation can improve company performance by 32.4%.

Relationship between variables	Account	Coefficient	conclusion
X <sub>1</sub> Against Y <sub>3</sub>	1,974	0,324	Significant positive

**Table 4.** Entrepreneurial Orientation Test Results on Company Performance

\* arthritis = 1,96

Based on Table 4 and the description above, it can be seen that the entrepreneurial orientation variable is in a low category.



**Picture 2.** Entrepreneurship Orientation Path Diagram on Company Performance

## 5. Conclusion

As the findings of (Kurnia, Raharja, & Sugiarto, 2019) show that high entrepreneurial orientation can improve company performance. The results of their research show the effect of entrepreneurial orientation on company performance by 0.555 or 55.5%. SMEs need a high entrepreneurial orientation. In the entrepreneurial literature, many researchers emphasize the importance of the entrepreneurial orientation-performance relationship, and in most studies, a strong relationship is found between entrepreneurship and firm performance.

The direct effect of entrepreneurial orientation on company performance is 13.9%, while the indirect effect is due to its relationship with the external environment and business strategy of 18.5%. In total, entrepreneurial orientation contributed/influenced 32.4% in improving company performance. This strengthens the research of (Hutahayan, 2019), which shows the relationship of entrepreneurial orientation of 0.261 or 26.1% to company performance. Based on the result of research, it is concluded that entrepreneurial orientation affects company performance. This conclusion has illustrated that a high entrepreneurial orientation is needed by SMEs because the company's performance is determined by the attitude of the business owner who dares to make decisions. The direct involvement of the owner in the business will improve the performance of his business.

## References

- Adiningsih, E. S., Tejasukmana, B. S., & Khomarudin, M. R. (2006). Dynamical land/forest fire hazard mapping of Kalimantan based on spatial and satellite data (pemetaan kebakaran lahan/hutan dinamis pulau Kalimantan berdasarkan data spasial dan satelit). *Agromet*, 20(1), 1–9.

- Anderson, Lauren, Aubourg, Eric, Bailey, Stephen, Beutler, Florian, Bhardwaj, Vaishali, Blanton, Michael, Bolton, Adam S., Brinkmann, Jon, Brownstein, Joel R., & Burden, Angela. (2014). The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: baryon acoustic oscillations in the Data Releases 10 and 11 Galaxy samples. *Monthly Notices of the Royal Astronomical Society*, 441(1), 24–62.
- Basco, Rodrigo, Hernández-Perlines, Felipe, & Rodríguez-García, María. (2020). The effect of entrepreneurial orientation on firm performance: A multigroup analysis comparing China, Mexico, and Spain. *Journal of Business Research*, 113, 409–421.
- Bernardin, H. (2013). John and Russel, Joice. EA, 2013. *Human Resource Management*.
- Burgelman, Robert A. (1983). A process model of internal corporate venturing in the diversified major firm. *Administrative Science Quarterly*, 223–244.
- Colaço, Miguel Maria. (2015). *The Role of Customer Relationship Management in Organizational Innovation Capability*. Universidade de Lisboa (Portugal).
- Gao, Yang, Ge, Baoshan, Lang, Xiangxiang, & Xu, Xiaobo. (2018). Impacts of proactive orientation and entrepreneurial strategy on entrepreneurial performance: An empirical research. *Technological Forecasting and Social Change*, 135, 178–187.
- Guth, William D., & Ginsberg, Ari. (1990). Guest editors' introduction: Corporate entrepreneurship. *Strategic Management Journal*, 5–15.
- Hasibuan, Malayu S. P., & Hasibuan, H. Malayu S. P. (2016). *Manajemen sumber daya manusia*. Bumi Aksara.
- Hutahayan, Benny. (2019). Factors affecting the performance of Indonesian special food SMEs in entrepreneurial orientation in East Java. *Asia Pacific Journal of Innovation and Entrepreneurship*.
- Kihanya, T. (2013). Challenges influencing the implementation of business strategies in public sector firms in Kenya: A survey of parastatals in the Ministry of Agriculture. *International Journal of Social Sciences and Entrepreneurship*, 1(2), 1.
- Kurnia, Cahya Mukti Dwi, Raharja, Edy, & Sugiarto, Yohanes. (2019). An investigation of factors affecting SMEs performance: an Indonesian case. *Diponegoro International Journal of Business*, 2(1), 52–56.
- Lumpkin, G Tom, & Dess, Gregory G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172.
- Lumpkin, George Thomas, & Dess, Gregory G. (2015). Entrepreneurial orientation. *Wiley Encyclopedia of Management*, 1–4.

- Lyon, Douglas W., Lumpkin, G. Thomas, & Dess, Gregory G. (2000). Enhancing entrepreneurial orientation research: Operationalizing and measuring a key strategic decision making process. *Journal of Management*, 26(5), 1055–1085.
- Magar, Dinesh Babu Thapa, Pun, Sirish, Pandit, Ram, & Rola-Rubzen, Maria Fay. (2021). Pathways for building resilience to COVID-19 pandemic and revitalizing the Nepalese agriculture sector. *Agricultural Systems*, 187, 103022.
- Munawir, Imam. (2000). *Metode Penelitian Sosial*. Surabaya: Usaha Nasional, t. th.
- Notoatmodjo, Soekidjo, Kasiman, Sutomo, & kintoko Rohadi, R. (2018). Patient's Behaviour with Coronary heart disease Viewed from Socio-Cultural aspect of Aceh Society in Zainoel Abidin Hospital. *MATEC Web of Conferences*, 150, 5065. EDP Sciences.
- Schuler, Randall S., Jackson, Susan E., Jackofsky, Ellen, & Slocum Jr, John W. (1996). Managing human resources in Mexico: A cultural understanding. *Business Horizons*, 39(3), 55–61.
- Sulistiyani, Ambar Teguh. (2018). *Manajemen Sumber Daya manusia: Pendekatan Teoretik dan Praktik untuk Organisasi Publik*.
- Wang, Catherine L. (2008). Entrepreneurial orientation, learning orientation, and firm performance. *Entrepreneurship Theory and Practice*, 32(4), 635–657.
- Zhao, Dumin, & Smallbone, David. (2019). What affects nascent entrepreneurs' proactiveness. *Asia Pacific Management Review*, 24(4), 318–326.

## Declarations

**Funding:** No specific funding was received for this work.

**Potential competing interests:** No potential competing interests to declare.