



Analysing The Operational Relationship to Business Performance in Small and Medium Enterprises

Rediawan Miharja¹, Nelly Martini², Evi Selvi³,
Agustifa Zea Tazliqoh⁴ and Intan Nur Octaviani⁵

^{1,2,3,4}University of Singaperbangsa Karawang, Indonesia

rediawan.miharja@fe.unsika.ac.id

Abstract. This study aims to determine how SMEs perceive operation and performance. This research method uses a quantitative approach with descriptive and verification analyses. The data used in this study is primary data obtained through the distribution of questionnaires. The verification analysis used in this study is multiple linear regression analysis with the SPSS 23 application. The research findings show that five independent variables simultaneously influence performance. Based on the t-test, four independent variables influence performance, namely equipment and technology (X1), supply chain (X3), standard operating procedures (X4), and enterprise data management systems (X5), while quality (X2) does not affect performance. The theoretical implications obtained in this study are related to business operational views and business performance. In theory, the relationship should be positive. Studies are related to business operational views and business performance. In theory, the relationship should be positive. The policy that can be taken in this study is to obtain high performance; it is hoped that business operational treatment cannot be equated with large and complex companies. The resulting framework is unique; however, SMEs provide perceptions of their operations and business performance. A business with a smaller size will undoubtedly produce a simpler and more reasonable overview of indicators compared to a larger company.

Keywords: *Operational; SMEs; Performance.*

1 Introduction

In today's era, Small and Medium Enterprises (SMEs) are important globally and vital to social mobility. This crucial role of SMEs aligns with data from the World Economic Forum, which shows that more than 90 per cent of all companies globally are SMEs and are a key driver of social mobility, creating seven out of 10 jobs by 2022. SMEs can be characterised by large firms by their constrained resources and different managerial capabilities and practices¹. According to research by Knight, 2001 and

Tanjung et al., 2022 SMEs play an essential role in a country's economic growth as one of the examples of research from2 said that SMEs are essential for the growth and stabilisation of the Indonesian economy. This important role of SMEs also needs to be encouraged on the operational or management side of operations to maximise economic turnover in SMEs. Currently, there is research on the performance of SMEs. However, Research on SMEs is still very possible to develop, according to3 many researchers and practitioners who have long recognised the significance of measuring performance. According to Heizer et al. 4, Operations is one of every organisation's three functions. Activities that relate to the creation of goods and services through the transformation of inputs into outputs are called Operations Man-agement. According to previous research with the keywords SME, operation, and performance, the results are as follows: Fig 1. shows the search results for the keywords Operation management, performance, and SME. The search uses the help of the publish or perish application, starting from 145 articles in general and then moving up to detailed sorting, resulting in 58 articles 22 and others. Furthermore, the data for 58 articles is entered into the Vosviewer application and produces the following relationship:

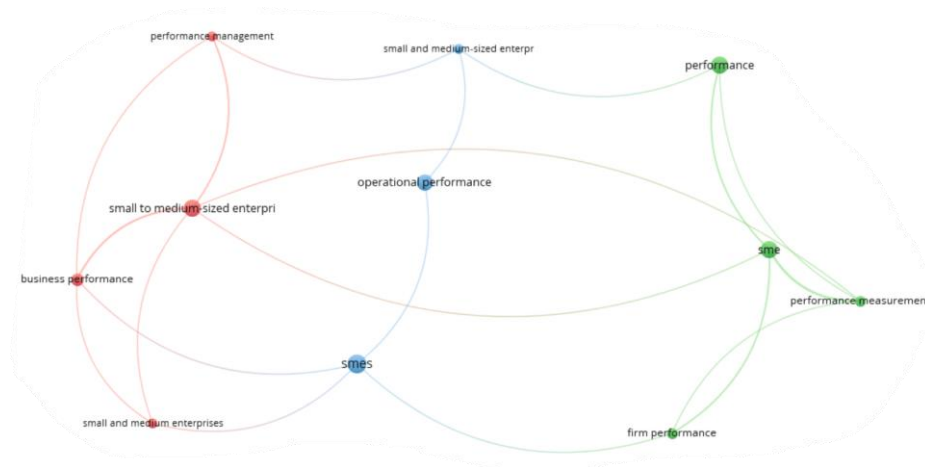


Fig. 1. Keyword Literature.
Source: Data Processed, 2023

Figure 1 shows that SME, operation, and performance are related. The relationship has not described the state of a positive or negative relationship because research on operations management is usually done with quantitative primary data and only case studies. There is still little operations management research using descriptive verification methods. Some studies that use research with descriptive verification methods are by Dito et al.²³, Kim and Z. Ali. In simple terms, the basic conceptual framework of variables

that can be interesting to test the relationship between Operations and Performance in MSMEs is as follows:

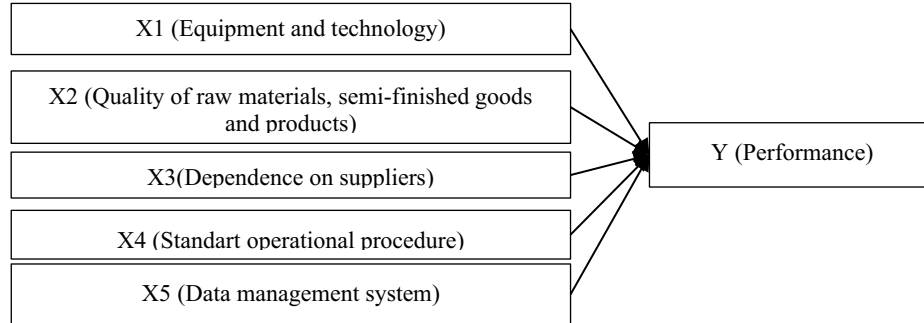


Fig. 2. The Conceptual Framework
Source: Data Processed, 2023

2 Method

The research method used is the quantitative research method using multiple linear regression analysis. In this study, multiple regression analysis was used to test whether the operating function accountability variables affect the performance of SMEs and partially test what operating function variables affect the performance of SMEs. Operations function accountability variables, which in the model are referred to as independent variables, consist of equipment and technology (X1), quality of raw materials, semi-finished goods and products (X2), Dependence on suppliers (X3), SOPs for each job owned by the company (X4), Data management system (X5). As for the Sustainability Performance of SMEs in the model, the dependent variable is represented by Performance (Y). The procedure of multiple linear regression analysis is the formation of multiple linear regression models: an F-test to test the simultaneous effect of independent variables on the dependent variable and a t-test to test the partial effect of independent variables on the dependent variable.

The data used in this study are primary data collected through questionnaires to respondents selected as samples in the specified population, namely SMEs in Bandung Raya. The method used to determine the selected sample is non-probability sampling, namely the purposive sampling technique. The number of samples used was 387 SMEs in Bandung Raya

3 Results & discussions

3.1 Result

1. Multiple linear regression model

The method used to conduct data analysis is multiple linear regression analysis with the help of SPSS 23 software. The processing results that have been carried out in this study use a linear regression model with the following details:

Performance = 18.466 + 0.783 Equipment and technology + 0.038 Quality of raw materials, semi-finished goods and products - 0.362 Dependence on suppliers + 0.539 SOP on every job owned by the company + 0.441 Data management system

Significance test of regression model

1) Simultaneous Test (F Test)

Hypothesis:

H₀: There is no simultaneous influence of independent variables on the response variable

H₁: There is a simultaneous effect of independent variables on the response variable

Based on ANOVA analysis, it can be shown that Sig < 0, so it can be decided that the null hypothesis is rejected. Thus, it can be concluded that there is a simultaneous influence of the five operating function accountability variables on the performance of SMEs.

2) Significance test of each parameter

Hypothesis:

H₀: $\beta_i = 0$ (there is no effect of the independent variable on the response variable)

H₁: $\beta_i \neq 0$ (there is an effect of the independent variable on the response variable)

The test results for each parameter are as follows:

Table 1. Partial Results

Variable	t-count	P-value	Decision	Conclusion
X ₁	4.833	0.000	Reject H ₀	Significant
X ₂	0.216	0.829	Fail to Reject H ₀	Not Significant
X ₃	-2.240	0.026	Reject H ₀	Significant
X ₄	2.960	0.003	Reject H ₀	Significant
X ₅	2.159	0.032	Reject H ₀	Significant

Source: Data Processed, 2023

3.2 Discussion

Based on the results of the study, the discussion material that can be conveyed is that the perception of SMEs has a view that is almost the same as companies in general as in previous articles⁵⁻¹⁵. SMEs realise the need for good operational management to achieve a good performance level. This is indicated by the simultaneous influence

between operational and performance. One variable that is an obstacle or partially has no significant effect is X2, which relates to the quality of materials provided early on. SMEs explained that material quality will affect the price and interest in purchasing SME products, which requires further research.

4 Conclusion

Based on the t-test at the 5% alpha significance level partially, four independent variables influence performance, namely equipment and technology, supply chain, standard operating procedures, and enterprise data management systems. At the same time, quality does not affect performance. The theoretical implications obtained in this study are related to business operational views and business performance. In theory, the relationship should be positive. Studies are related to business operational views and business performance. In theory, the relationship should be positive. The policy that can be taken in this study is to obtain high performance; it is hoped that business operational treatment cannot be equated with large and complex companies. The resulting framework is unique in how SMEs perceive their operations and business performance. A business with a smaller size will undoubtedly produce a simpler and more reasonable overview of indicators compared to a larger company. SMEs have almost the same perception as large companies, but because SMEs are simpler, the perception of SME quality considers the price that will be spent.

5 Acknowledgements

The authors would like to thank the University of Singaperbangsa Karawang for funding the publication of this research.

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