The Performance of MSMEs: a Comprehensive Approaches based on Resource, Customers, Suppliers, and Characteristics of MSMEs

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ABSTRACT

This study focuses on MSMEs performance evaluation because they have unique features such as not having a quantifiable objective, not having a record of company operations, but being able to absorb surrounding labor and improve the community's welfare. MSMEs' short-term objective is to annex the company's profit and sales performance. This research aims to construct a measurement model of MSMEs Performance based on resource factors, customers, suppliers, and characteristics of MSMEs in influencing MSMEs' performance. The data was collected by spreading questioner through google form to MSMEs managers assisted by PLUT Batu city and Malang City. The data analysis techniques are carried out qualitatively, and hypothesis testing is carried out with SEM-PLS analysis. The results showed that the factors of resources, customers, and characteristics of MSMEs could measure MSMEs performance, while the supplier factor does not affect the performance of MSMEs.

1. Introduction

The current economic condition is declining rapidly with covid-19, including Micro Small Medium Enterprises in Malang Raya. MSMEs use local resources and local marketing. It is precisely one of the advantages of MSMEs to still survive in the current economic downturn. The condition requires an assessment of MSMEs performance based on finance and considering non-financial performance in ensuring business viability.

A business is established with a variety of objectives, both short-term and long-term goals (Bocken & Geradts, 2020; Shakeel, Mardani, Chofreh, Goni, & Klemeš, 2020). Short-term goals are related to achieving profit, while long-term goals are related to business continuity. Environmental elements have a direct or indirect influence in influencing performance. Environmental elements include suppliers (vendors), customers, trade unions, financial communities, shareholders, competitors, governments, and the global community (Freel, 2005). The flow of resources must be managed efficiently to achieve the company's objectives. Thus assessing the company's performance becomes essential for managers and other stakeholders. Therefore, the performance assessment model must be appropriate for the character of the industry.

This research is focused on MSMEs performance assessment because it has unique characteristics, including not having a measurable goal, not having a record of business activities but being able to absorb the surrounding labor and improve the community's welfare. Observing the role of MSMEs, MSMEs become one of the most important economic forces of the people because they can absorb much local labor and help the government improve the populist economy. Therefore, MSMEs need to be developed from various aspects, including the legality, management, and environmental aspects that affect achieving goals. The short-term goal of MSMEs is to annex the company's performance in profit and sales (Pompeia, 2021). However, by achieving profit and sales, MSMEs will achieve long-term goals because they can contribute to labor absorption and increase income.

Financial and non-financial approaches can measure the measurement of MSMEs performance. Performance measurement by combining financial and non-financial approaches is known as the Balanced Score Card assessment. Balance Score Card approach found by Kaplan & Norton (Hansen, Mowen, & Heitger, 2021) to translate the organization's mission and strategy in operational objectives and performance measures in four perspectives: financial perspective, customer perspective, internal business process, and learning and growth perspective. The financial approach is very measured and has been widely used, while the non-financial approach is not easily measured, and only a few of the MSMEs use it. The financial approach can be measured by sales or profit, while the non-financial approach can be measured from customers' perspective, internal Business Processes, learning, and growth.

Other research on MSMEs performance has been conducted by Hanggraeni, Ślusarczyk, Sulung, and Subroto (2019). The research on determinants of MSMEs performance in Depok and Jakarta found that internal factors influence MSMEs performance in operational management, marketing, technical and external factors of the industrial situation. Research on Nejati, Amran, and Ahmad (2014) on MSMEs in Malang. The study results found that four factors can indicate MSMEs performance assessment: resource factors, financial factors, relationship factors with customers, and related factors with suppliers. The resource factor can consist of human resources and physical facilities. The customer factor consists of a strategy to find new customers, respond to customer complaints, and acquire new customers. Finally, supplier factors can be determined by fulfilling the required quantity of goods and the quality of goods following the provisions. However, this research has not proven how much influence these factors have in achieving MSMEs performance. Therefore, this research was conducted to test non-financial factors influencing the achievement of MSMEs profit (Buswari, Setiawan, & Khusniyah, 2021).

The characteristics of MSMEs have different characteristics from large companies, for example, related to the size of the business or related to the age of the business. The size of the business affects the size of MSMEs capital, so there is a possibility of affecting MSMEs performance. The lifespan of the business can be determined from the length of the business standing. Anderson, Eshima, and Hornsby (2019) found that the longer the business's life, the better the advantages in the structure and routine process to discipline each company's activities because it has repeatedly passed the evaluation process to achieve goals. Finally, the size of the business is determined by the number of assets owned by MSMEs (Subagyo, Kumar & Ernestivita, 2020).

Various researches on MSMEs financial performance have been conducted, research of this nature is still very infrequently conducted on financial factors, non-financial factors, company characteristics, a small number of companies with company performance. Also, variable sizes vary from research to other, as Hanggraeni et al. (2019) measure MSMEs performance with market position performance and profitability performance, and internal factors include operational management, marketing, and technical while external factors are the industrial situation. In contrast, (Ramadhani, Qurtubi, Suryoputro, & Sutrisno, 2019)have similar research using variables according to the balanced scorecard. Another research conducted by Nugraha, Susilo, and Aini (2018) measured MSMEs performance with non-financial value-added of intangible assets as measured by employee performance. MSMEs performance can also be measured based on MSMEs' ability to ensure MSMEs' survival or known as going concerned. Totanan (2018) found that production facilities and production quality influence the sustainability of MSMEs.

Based on the explanation above, a further study is needed related to factors that can affect MSMEs performance based on internal and external factors. The results of this research can consider MSMEs in achieving their goals and evaluating their performance based on internal factors and external factors. Therefore, based on the explanation above, the formulation of the problem of this research is:

a. Does the factor of resources, customers, suppliers, and characteristics affect the performance of MSMEs?
b. What is the Model of measuring MSMEs performance based on resource factors, customers, suppliers, and MSMEs characteristics?

2. Literature Review

The characteristics are based on hereditary and traditional skills concerning small industries, while technology is limited. Small industries and household handicrafts have several advantages over large industries. It has flexibilities and adaptation capabilities that are difficult to do in large industries do not depend on energy sources and therefore can be seen from the energy crisis, the marketing of handicraft goods is not so affected by the global economic recession and the decrease in the intensity of international trade and has a source of world income (Ghouse, 2012). The characteristics of small industries can be described as follows: a) small industrial units are units of household industry and folk crafts with a limited number of handicrafts and loose division of labor, b) most come from their own families who are sometimes not given a salary, although given the wages of the relationship between workers and employers are very unofficial, c) the technology used is simple and has not been done mechanically / automatically, d) raw materials are primarily obtained from the same area e) how to market the goods produced not with promotions or ad extensions that are very necessary for business development, but rather through intermediaries, f) have a role in providing a living and increasing family income, opening up more employment opportunities and helping businesses, g) management of business origin of the road without good management knowledge and various other

characteristics that cause difficulties in advancing its business (Gregory, Salverda, & Schettkat, 2021; Viriyasitavat & Hoonsopon, 2019).

In addition, small industries also provide significant social benefits for the economy, namely: a) small industries can create vast business opportunities with relatively cheap financing; b). Small industries also play a role in improving and mobility domestic savings; c) Small industries have complementary positions to large and medium industries. Small industries produce relatively cheap and simple products, not usually produced by large and medium industries MSMEs need to set strategies to achieve their goals (Borshalina, 2019). A strategy is a very complex concept. Strategy management includes management decisions that have a long-term impact on the company's future success. Historically, strategy management has been used to systematically address the company's external factors and the resulting decisions, resulting in differences in financial performance between companies and competitors (Zahra, 1996). Liu, Lai, and Cai (2021) researched to build practical sustainability and operations on SMEs in China. Yao Li (2011) uses restrained-scale and capital-deficiency but at the same time innovates to achieve integration between supply chain partners, more efficient cash flow, accelerate growth, and maintain long-term profits. Similarly, the exploration of MSMEs strategy in Italy has been conducted by Köhr, Camanzi, and Malorgio (2018) found that the understudy MSMEs strategy factors are international diversification and geographic scope.

Performance assessment based on financial and non-financial has been conducted by Galankashi and Rafiei (2021). The study used the Balanced scorecard approach, finding that financial perspectives, customers, and internal businesses showed good performance, but the lack of human resources resulted in learning perspectives, and growth showed poor results. Nugraha et al. (2018) researched MSMEs advertising and advertising in Malang found that human capital affects non-financial performance. Similarly, research conducted on 111 companies in Spain by Prieto and Revilla (2006) found that customer factors, employees, society can be a factor to achieve better financial performance. Latifah and Syam (2020) found that MSMEs performance indicators consist of four factors: resource factors, financial factors, customer factors, and supply chain management factors. Historically, strategy management has been used to address the company's external factors and the resulting decisions, systematically resulting in differences in financial performance between companies and competitors (Bracker, Keats, & Pearson, 1988). When people face a situation, they do a strategy to take action.

Then the strategy in a psychological sense is defined as the sequence of means to achieve a goal. In other words, a strategy can be considered as a plan for action that affects how a person does things. As we all know, the COVID-19 pandemic, which started in early 2020 until 2021, will not end. Of course, this impacts various sectors, including the economic sector, trade, and business growth, affecting MSMEs. It is proven that it is challenging for an MSMEs to carry out their business activities during the COVID-19 pandemic because of various restrictions carried out by the government. One of the restrictions is that business fields are not allowed to operate, such as public transportation, hotels and inns, tourist attractions, culinary businesses, and coffee. The tightening also has an impact on difficulties in selling goods, obtaining and purchasing materials from suppliers. As we all know, the COVID-19 pandemic, which started in early 2020 until 2021, will not end. Of course, this impacts various sectors, including the economic sector, trade, and business growth, affecting MSMEs. It is proven that it is challenging for an MSMEs to carry out its business activities during the COVID-19 pandemic because of various restrictions carried out by the government. One of the restrictions is that business fields are not allowed to operate, such as public transportation, hotels and inns, tourist attractions, culinary businesses, and coffee. The tightening also has an impact on difficulties in selling goods, obtaining and purchasing materials from suppliers.

Furthermore, including tightening employee working hours affects productivity. So that not a few MSMEs were forced to reduce employees because they could not pay employee salaries due to a

very drastic decline in sales. Based on these conditions, measuring MSMEs performance based on sales is no longer relevant because it only assesses performance based on financial aspects. For this reason, a more appropriate MSMEs performance appraisal method is needed based on economic and non-financial factors. The method for assessing performance based on financial and non-financial aspects is the Balanced Score Card method.

Alonso et al. (2021) found that financial management performance has a strong and positive correlation with the education level of MSMEs managers, and the influence of MSMEs age varies on MSMEs performance (Karadag, 2017). Appiah-Adu and Singh (1998) researched MSMEs in the UK found that customer orientation affects sales growth and Return on Investment. Similarly, Subhan and Putro (2017) researched MSMEs in west Java found that supply chain management affects their performance. However, the role of the company's lifespan is minimal in influencing performance. Research on human resources has been conducted by Nugraha et al. (2018) at the advertising and advertising association in Malang found that individual capability affects the company's performance. Similarly, Totanan (2018) found that production quality affects the going concern of MSMEs in Palu City. Therefore, this research hypothesis is: Resource factors, customers, suppliers, and characteristics of MSMEs affect the performance of MSMEs.

3. Research Method

The research scope carried out is MSMEs in Malang and Batu cities who are members of MSMEs groups under the guidance of the Office of Cooperatives and MSMEs Malang and MSMEs under the guidance of PLUT-KUMKM (Integrated Service Center-Cooperative Micro, Small and Medium Enterprises) Batu City. Following the research objectives to understand the performance measurement model in achieving MSMEs profit uses a purposive model. Sampling selection with a purposive Model is made by judgment sampling. Aly and Duboff (1971) stated that judgment sampling is a random selection of samples, not randomly whose information is obtained with specific considerations. As a result, samples are selected that can provide the information the researchers need.

Further explained in developing this purposive technique, researchers use their specialized knowledge or expertise by choosing which one is held to represent a population. This purposive technique determines responses include leaders (MSMEs managers), sales department employees, and production department employees. Research variables and measurement scales. Variables consist of two exogenous and endogenous variables. Here are an explanation and measurement. Exogenous Variables: Human resource factors are assets owned by MSMEs measured by employee training, budget funds for employee training, facilities for employees, and compensation for employees. The customer factor is customer satisfaction, as measured by customer loyalty. Supplier Factor is the relationship of MSMEs with suppliers as measured by suppliers' ability to meet the number of materials and delivery accuracy. The characteristics factor of MSMEs, using the size according to Law No. 20 of 2008 on MSMEs. Micro-Enterprise Category: turnover < Rp 300 million, small businesses: turnover more than IDR 300 million and maximum IDR 2.5 billion; Medium Enterprises: has a turnover of more than IDR 2.5 billion to IDR 50 billion. The number of workers also measures the character of MSMEs. Micro Enterprises if the number of kindergartens is less than five people, small businesses if labor five people to 19 people, and medium enterprises if the number of workers is more than 20 people. Measurement of MSMEs rusty using an ordinal scale, number 3 is higher than 2, so on. Endogenous Variables: MSMEs performance as measured by financial performance and going concerned. Financial performance indicators use sales growth and going concern indicators with MSMEs innovation. The measurement of the ordinal scale of the variable is from numbers 1-5. Development of research instruments based on the results of Latifah and Syam's (2020) research.

The research data was collected by sending questionnaires to MSMEs in Batu and Malang and the MSMEs consumers. Data analysis is done with a quantitative approach. The first stage is a test of the validity and eligibility of data to conduct a statistically descriptive test and perform the meaning of research data. Then, hypothesis testing is done with the Smart PLS application. The first conducted Research Instrument Test, which includes Validity Test and Reliability Test Validity. The validity test in this study was used to measure the validity or validity of a questionnaire. A questionnaire is called valid if the question can decipher what will be measured from a questionnaire (Unaradjan, 2019).

Reliability is the translation of the word reliability which means trust, reliability, and consistency. Reliability is a tool to measure a questionnaire that indicates variables or constructs. A questionnaire is reliable or reliable if a person's answer to a statement is consistent or stable over time. In determining the reliability or un, the usable alpha value limit is 0.6. The realities of less than 0.6 are not good, reliability 0.7 is acceptable, and reliability 0.8 is good. Reliability test is the degree of freedom from variable errors to provide consistent results. Reliability test using Cronbach alpha test where the minimum value is 0.6. Discrete statistical analysis is carried out to illustrate the results.

Meanwhile, the design of the test model uses SEM-PLS Path Analysis. It is a structural model that connects latent variables involving the relationship between exogenous and dependent variables: resource variables, customers, suppliers, company characteristics, to the performance of MSMEs. The hypothesis's acceptance in the test results is to look at the p-value for the path coefficient. The test conducted by this study uses SEM-PLS with the Smart PLS program. Hypothesis testing for direct influence testing on this study uses the p-value as a criterion for the hypothesis's acceptance or rejection.

4. Results and Discussion

a. Result
Descriptive Statistical Analysis

Table 1: The Results of Descriptive Analysis

Variabel	N	Minimum	Maximum	Mean	Std. Deviation
X1.1	99	1	5		0,769
X1.2	99	1	5		0,969
X1.3	99	1	5		0,768
X1.4	99	1	5		0,730
X2.1	99	1	5		1,280
X2.2	99	1	5		0,705
X2.3	99	1	5		0,812
X2.4	99	1	5		0,71
X2.5	99	1	5		0,812
X3.1	99	1	5		0,648
X3.2	99	2	5		0,768
X4.1	99	1	3		0,632
X4.2	99	1	3		0,509
Y1	99	1	5		1,103
Y2	99	1	5		0,993
Valid N (listwise)	99				

Source: Data Processed (2021)

Based on table 1, it can be said that in general, human resource factors with employee training indicators have an average value of 4.14 which means MSMEs have conducted training, and the average value of the training cost budget is 3.59, so it can be said that MSMEs have budgeted employee training costs. Indicators of facilities for employees also have a relatively high value of an average of 4.18. The compensation indicator for employees with an average value of 3.91 can also be high, which means MSMEs have also provided compensation to employees.

Customer factor as measured by new customer indicator has an average value of 3.35 which means MSMEs have new customers with good value. Indicators of customer complaints can be good, and MSMEs have a fast and good response because the average value is 4.18. Product variation indicators have an average value of 3.75 which means MSMEs have a sufficient product variation increase. The sales service indicator has an average value of 4.16 which means MSMEs have provided good sales services for customers, but the after-sales service is said to be quite good (3.65)

Supplier factor has a quantity indicator with an average value of 4.26 which means MSMEs already have suppliers who can meet the materials needed, with a reasonably precise delivery time (average value of 3.96). When viewed from the increase in selling, MSMEs' performance shows an average value of 3.74, so it can be said that there has been a relatively high increase in selling, and the innovation indicator has a value of 3.85 which means MSMEs have made relatively high innovations.

Respondent Demographics

The data was obtained from May to October 2020 by distributing questionnaires shared with respondents online through google form with a total sample of 99 respondents. From the data produced by the questionnaire, the demographics of respondents studied include Types of MSMEs, Years of Establishment, Branch Ownership, and Position of Respondents. The types of MSMEs can be known that most businesses owned by respondents are food with 37%. For businesses with this type of snacks and beverages came in second with a percentage of 26%. For handicraft, businesses have a percentage of 14%, convection by 8%, Beauty by 6%, Workshops by 3%, printing by 2%, and other businesses as much as 4% of the total type of business owned by respondents. Year Of Establishment MSMEs businesses was established between 2000 to 2010. It is evidenced by the percentage of MSMEs established in 2000-2005 of 42% and 2006-2010 of 42%. For businesses established in 2010-2015 has a percentage of 9%. Furthermore, businesses established in 2016-2020 have a percentage of 7%, which means that about 7% of respondents from the total respondents founded the company in that year. Respondent's Position is evidenced by the owner's position percentage of 80% of the total respondents. For the remainder, respondents who served as CEO were 2%, Directors by 7%, managers by 7%, Marketing by 2%, and Employees by 2%. MSMEs that are respondents of research all do not have branches. It can be seen with the percentage of not having branches of 100% of respondents' objective opinion.

Model Test Results

Model testing is performed using the Partial Least Square (PLS) method. For measurement model in PLS is divided into two, namely Outer Model and Inner Model. The outer Model is carried out aimed at measuring the relationship of indicators with latent variables. In contrast, the inner Model aims to measure the relationship between latent variable.

Validity and Reliability Test

Table 2: The Validity and Reliability Analysis

Matrix	Composite Reliability	Average Variance Extracted (AVE)
Resources	0,836	0,576
Customer	0,722	0,572
Suppliers	0,855	0,750
Characteristics	0,749	0,909
Performance MSMEs	0,7530,612	0,612

Source: Data Processed (2021)

The data is valid if the AVE value is more significant than 0.5. It can be seen in table 2. Human resource AVE value is 0.576, customer variable AVE value is 0.572, supplier AVE value is 0.750,

AVE value of MSMEs characteristic variable is 0.609, and MSMEs performance AVE value is 0.612. Thus all latent exogenous and endogenous variables show valid because the AVE value is more than 0.5. The next test is the reliability test. Reliability is indicated if the composite reliability value is more than 0.7. Furthermore, It can be seen from table 2 above that the composite reliability value of human resources is 0.836, the composite reliability value of customer variables is 0.722, the supplier's composite reliability value is 0.855, the composite reliability value of variable MSMEs characteristics is 0.749. The composite reliability value of MSMEs performance is 0.754. Thus all latent variables of exogenous and endogenous show reliability because the composite reliability value is more than 0.7.

Hypothesis Testing

To facilitate understanding, researchers presented an image of the relationship between exogenous latent variables (independent) to endogenous latent variables (dependents) first. Then, here is a model image to see the influence of latent exogenous variables consisting of human resources, customers, suppliers, and characteristics of MSMEs to endogenous variables, namely MSMEs' performance.
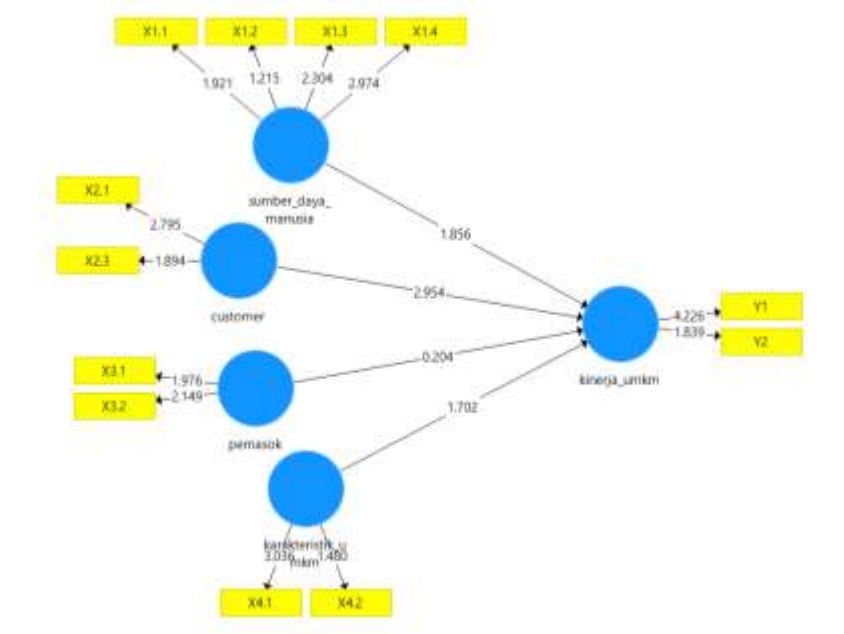

Figure 1: Inner model Analysis Results
Source: Data Processed (2021)

The research hypothesis is accepted if the t-value of each variable is greater than the T-table and the significance level is less than 0.10. It can be seen that each t count is more excellent than T-table and significant. Based on figure 4.2 calculation of the HR factor of 1,856, HR factors affect the performance of MSMEs as measured by the Development and innovation of MSMEs.

Table 3: Coefficients Path Results

Variable	Coeficient	P Values	Conclusion
Resources->MSMEs Performance	0,274	0.034	Hypothesis accepted
Customer-> MSMEs Performance	0,364	0.004	Hypothesis accepted
Suplier -> MSMEs Performance	-0,027	0,833	Hypothesis not accepted
Characteistis->MSMEs Performance	0,183	0,089	Hypothesis accepted

Source: Data Processed (2021)

If viewed from table 3 above, the human resources, customer, and characteristics factors of MSMEs significantly affect MSMEs' performance. However, supplier factors do not have a significant effect on the performance of MSMEs.

Based on the path coefficient results, human resources have a positive and significant effect on the significance level of 10% with a t statistic value of 1,733, with a P Value of 0.084 on MSMEs based on sales and innovation MSMEs. Likewise, customers positively and significantly affect MSMEs' performance with a statistical t value of 0.288 and a P-value of 0.004. On the other hand, supplier variables have no significant effect on MSMEs performance because the P-value is greater than 0.10, 0.833. Finally, the distinguishing factor of MSMEs has a significant influence on MSMEs' performance, with a t value of 1,704 and a p-value of 0.089.

The human resources influence factor 0.274 has a significant level of 0.084. It means an increase in the HR factor by one percent (1%) can increase MSMEs performance by 8.4%. Likewise, the influence of the customer factor is 0.364, which means that if there is a 1% increase in customer factor, MSMEs performance will increase by 36.4%. Similarly, MSMEs' characteristics factor influences MSMEs' performance by 0.183, which means that if the characteristics factor of MSMEs increases by 1%, then the performance will increase by 18.3%.

Table 4: Analysts Dominant Indicators

Variable	Coefficient	P-value
$X_{1.1}$ (employee training)	0,790	0,055
$X_{1.3}$ (employee facilities)	0,836	0,022
$X_{1.4}$ (employee compensation)	0,901	0,003
$X_{2.1}$ (new cutomer)	0,874	0,005
$X_{2.3}$ (product variation)	0,616	0,059
$X_{3.1}$ (quantity of goods from suppliers)	0,754	0,049
$X_{3.2}$ (accuracy of time delivery)	0,965	0,032
$X_{4.1}$ (number of labour)	0,922	0,003

Source: Data Processed (2021)

Table 4 shows the dominant forming indicators of latent variables. It can be seen that the human resources factor is formed by X1.1 (employee training) with values of 0.790 and X1.3 (facilities), with values of 0.836 and X1.4. (compensation) A value of 0.901 at a significance level below 0.10, while X1.2 (training budget) is a Human Resources variable shaper but not insignificant.

However, the customer factor points to the forming indicator are X2.1 (recent customer acquisition) with a coefficient value of 0.874 and X2.3 (product variation) with a value of 0.616 and a significance level below 0.10, while X2.2 (customer complaint handling) is not a custom indicator. The forming indicator's supplier factor is X3.1 (quantity of goods from suppliers) with a coefficient of 0.754 and X3.2 (accuracy of time delivery) with a coefficient of influence of 0.965 and a sig level below 0.10. The distinguishing factor of MSMEs is X4. 1, with an effect of 0.922 and a sig rate of 0.003. However, X4.2 (number of labor) is an indicator of the characteristics of MSMEs is insignificant. The performance factor of MSMEs, the dominant indicator shaper is Y1 (sales growth) and Y2 (MSMEs innovation) with a sales growth value of 0.912 and innovation indicators with a value of 0.627 with a significance level below 0.10.

Furthermore, MSMEs Performance Measurement Model are as follows:

Based on the hypothetical test results can be formed a mode of measurement of MSMEs performance based on finance (profit growth) and based on non-financial as measured by going concern, namely MSMEs innovation as follows:

$$Y = \alpha + 0.79\ X1.1 + 0.836\ X1.3 + 0.901X1.4 + 0.874\ X2.2\ 1 + 0.616\ X2.3 + 0.754X3.1 + 0.965X3.2 + 0.922\ X4.1 + e$$

With Y is the performance of MSMEs based on sales growth and MSMEs innovation. X1.1 employee training, X1.3 employee facilities, X1.4 employee compensation, X2.1 new customers X2.3 product variation, X3.1 quantity of goods from suppliers X3.2 accuracy of timely delivery, and X4.1 number of labor. The coefficient of employee training variables of 0.79 indicates that if employee training variables increase by 1%, it will affect MSMEs performance by 79%, assuming other variables remain (constant). Furthermore, the employee facilities coefficient of 0.836 indicates that if the employee facility increases by 1%, then the performance of MSMEs will increase by 83.6%, assuming other variables remain. The employee compensation variable has a coefficient of 0.901 which means that if employee compensation rises by 1%, then MSMEs performance will increase by 90.1%. New customer variables have a variable coefficient of 0.874 which means that if new customers increase by 1%, then MSMEs performance increases by 87.4%. If product variations increase by 1%, then MSMEs performance will increase by 61.6%. The variable quantity of goods from suppliers has a coefficient of 0.754, indicating that if there is a 1% increase in the variable quantity of goods from suppliers, there is an increase in MSMEs performance by 75.4%. Similarly, if there is a 1% increase in the accuracy of goods delivery from suppliers, there is an increase in MSMEs performance by 96.5%. MSMEs characteristic variables based on the number of workers that increase by 1% will increase MSMEs' performance by 92.2%.

b. Discussion

The test results on the proposed research hypothesis prove that the resource, customer, supplier, and MSMEs characteristics affect the performance of MSMEs. Based on the results of data analysis, it can be found that the resource factor affects the performance of MSMEs. These resource factors consist of employee training, employee facilities, and employee compensation. MSMEs in Malang and Batu hold training for employees at least once a year. The most frequently attended training is the training held by the Cooperatives and SMEs Office, the Health Office, or PLUT on skills and financial administration. This training is free of charge and is a government program. In addition, training for MSMEs employees is carried out by universities through the Community Service program. MSMEs also provide facilities for their employees, such as a comfortable space to work and a good place or building to feel comfortable working. Another Human Resources (HR) factor is the compensation given to employees in salaries, bonuses, and holiday allowances. Because HR management is family-friendly, employees feel ownership, happy and comfortable working in the business. This finding is in line with the research conducted by Sandra and Purwanto (2017), which states that human resources affect the performance of MSMEs in Jakarta, and the result of Waiganjo, Mukulu, and Kahiri (2012) that human resources affect organizational performance. Likewise, Totanan (2018) stated that employee facilities for production affect the going concern of MSMEs. Employee training carried out by MSMEs has proven to impact employee MSMEs human resources affect MSMEs performance as measured by financial performance and MSMEs innovation. As research by Rumijati (2020) that learning organizations affect employee performance.

Customer factors affected the performance of SMEs. The customer factor consists of strategies, how MSMEs get new customers, and the variety of products produced by MSMEs. The performance of the MSMEs customer aspect is strongly influenced by how MSMEs get new customers. As this research data shows, the average number of customers in 2020 is six hundred and seventy-two (672) people. MSMEs use simple social media, namely through marketplaces, Facebook, and Instagram. Besides expanding market reach with social media, MSMEs also post additional products or new product variations. Like the MSMEs, Agro Citra Abadi in Batu City, which initially produced apple

chips, has added taro chips. Tempe Chips SMEs in Sanan Malang Village have made tempe chips with various flavors. This finding supports the research of Alimudin, Falani, Mudjanarko, and Limantara (2019) that found that the customer perspective affects the performance of MSMEs in Surabaya. The customer perspective is measured by service to customers, and the implementation of MSMEs is measured by increasing revenue and profit growth and growing customers.

Supplier factors do not affect the performance of SMEs. This supplier factor consists of the fulfillment of the number of goods ordered and the accuracy of delivery. MSMEs have used the internet to collect materials from suppliers. Ordering through internet media can ensure the amount of material provided and the amount needed by MSMEs, thereby reducing material shortages. In addition, the results of this study indicate that the materials required by SMEs are sufficient to obtain from local suppliers. It is a strength in the unfavorable economic conditions as a result of the Covid-19 pandemic. Materials are easily obtained because they are only from Malang City, Malang Regency, or Batu City itself, so material delivery transportation is always on time. Based on data, fifteen percent (15%) of the sample MSMEs use private vehicles to buy materials, and the rest use expedition services. The finding is following the research results of Eyaa, Ntayi, and Namagembe (2010) that the information shared for suppliers will be related to the performance of MSMEs. Likewise, the results of research conducted by Vernosfaderani (2021) show that good procurement practice is one of the obstacles for SMEs in implementing the Supply Chain. However, it is different from the findings of Sarwanti, Hasiholan, and Wulan (2017) that the cost of raw materials affects the performance of MSMEs.

Following supply chain theory (Laudon & Laudon, 2009; McLeod Jr & Schell, 2008) the flow of resources through the supply chain must manage the flow of resources through the supply chain to ensure that the discharge occurs in a timely and efficient manner. This process is known as supply chain management. Supply chain management is transporting resources to customers and tracking the flow of resources from the supplier (Shcherbakov & Silkina, 2021). It consists of the following activities forecasting customer demand, creating production schedules, setting up a transportation network, ordering replacement supplies from suppliers, receiving supplies from suppliers, managing inventory, and carrying out production.

This study results align with the survey conducted in India by Kumar, Singh, and Shankar (2015) related to the success factors for implementing Supply Chain Management in SMEs in India and their impact on performance. The study results recommend developing an effective supply chain strategy after analyzing the business environment and long-term plans. Likewise, Yao Li (2011) builds sustainable and effective operations for SMEs in China using supply chain management.

MSMEs characteristic factors affect the performance of MSMEs. So it is if indicators of the number of workers measure the characteristics of MSMEs. Therefore, the most appropriate elements of MSMEs are measured by worker numbers, evidenced by the results of this study. The number of sample MSMEs workers is seven people. However, there are also MSMEs with a workforce of fifty-seven people, namely MSMEs engaged in the culinary field and MSMEs engaged in handicrafts with thirty employees. The distinguishing factors of MSMEs follow the size according to Law Number 20 of 2008 concerning MSMEs. Thus the sample of this study is classified as "Small Enterprises" because it has a workforce of 5 to 19 people. Although it has an average force of seven people, it is proven that MSMEs have good performance in HR, customers, and suppliers. According to the research results of Iskandar, Zulbainarni, and Jahroh (2020), the characteristics of MSMEs have a positive and significant effect on the performance of MSMEs.

5. Conclusion

MSMEs characteristic factors affect the performance of MSMEs. So it is if indicators of the number of workers measure the characteristics of MSMEs. Therefore, the most appropriate elements of MSMEs are measured by worker numbers, evidenced by the results of this study. The number of sample MSMEs workers is seven people. However, there are also MSMEs with a workforce of fifty-seven people, namely MSMEs engaged in the culinary field and MSMEs engaged in handicrafts with thirty employees. The distinguishing factors of MSMEs follow the size according to Law Number 20 of 2008 concerning MSMEs. Thus the sample of this study is classified as "Small Enterprises" because it has a workforce of 5 to 19 people. Although it has an average force of seven people, it is proven that MSMEs have good performance in Human Resources, customers, and suppliers. Based on the results of data analysis, it can be concluded that the factors of resources, customers, and characteristics of MSMEs affect MSMEs' performance. However, supplier factors cannot be used to determine the performance of MSMEs. Based on these investigation results, MSMEs management should improve human resources and facilities, improve ways to increase customer loyalty, and pay attention to MSMEs' needs based on the number of workers

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