KSPPS Financing, Product Innovation, and Technology as Determinants of MSME Growth in Pekalongan City

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ABSTRACT

Purpose: This study aims to determine the effect of KSPPS Financing, Product and Technology Innovation as Determinants of Growth of MSMEs in Pekalongan City. This study uses descriptive analysis, with a quantitative approach.

Design/Method/Approach: The data collection method used in this study was a closed questionnaire. The data was processed by multiple regression analysis with SPSS tools. Prior to data analysis, the instrument was tested with validity and reliability tests. The analysis prerequisite test was also carried out to fulfill the requirements for the regression model data analysis.

Findings: The results of this research there are only 2 independent variables that have a positive and partially significant effect of dependent variable, namely the product innovation variable with a value of tcount 3.783 > ttable 1.665 with a significance value of 0.000 < 0.05 and technology variable with tcount 4.734 > ttable 1.665 with a significance value of 0.000 < 0.05. While the KSPPS financing variable partially has no effect on the growth of MSMEs because tcount -0.000 < ttable 1.665 with a significance value of 0.996 > 0.05. However, simultaneously all independent variables affect the dependent variable with a value of fcount 19.001 > ftable 2.72 and a significance value of 0.000 < 0.05.

Originality/Values: The main contribution of this research concern on find out the benefits of KSPPS Financing to effectively improve the welfare of MSME’s in Pekalongan City.
INTRODUCTION

Pekalongan was selected as a creative city network by UNESCO. In Pekalongan City, the number of Micro, Small and Medium Enterprises (MSMEs) increased significantly, which was 21,561 units in 2018 to 22,781 units in 2019 (Ella Disperindagkop, 2019). The very significant growth of MSMEs in one year amounted to 1220 units, making Pekalongan City's economy also increase significantly. MSMEs are able to create more job opportunities and can also easily access indigenous resources. MSMEs mostly dominate micro, small and medium enterprises that operate in businesses that have many competitors. MSMEs often experience difficulty getting capital, especially in the beginner Limited human resources can get in the way of technologies or innovations.

Financial problems, which can be a major obstacle for MSMEs, can now apply for joint credit guarantees, and microfinance schemes as opposed to bank loans (Kreft & Sobel, 2005). Bank Indonesia has provided credit to micro-enterprises through KUR by state-owned banks, especially Bank Rakyat Indonesia. However, the phenomenon now is that there is a lot of financing by Conventional Banks and Islamic Banks as well as BMTs and Cooperatives that channel a lot of credit to finance MSMEs. As a result, many financial institutions are growing rapidly in Pekalongan City.

Besides Sharia Banking, there is now a Sharia Savings and Loans Cooperative (KSPPS) in Pekalongan City, the Creative City. KSPPS is a cooperative that is engaged in savings and loans and financing with sharia principles, also regulates zakat, infaq, and waqf (DSN-MUI Team, 2019). KSPPS's business activities in financing include profit sharing, leasing and buying and selling. The many variants of product financing from KSPPS make it easier for MSMEs to access capital. Through KSPPS financing, MSMEs can innovate and access technology.

In the face of increasingly fierce business competition, MSME players must also innovate, to create products to be marketed (Jong and Wennkers, 2008). MSME entrepreneurs must innovate to compete with other business competitors in the market.

The innovation is used to contribute well to the future of the organization. This also applies to the MSME sector. In general, innovation can be carried out and is defined as: “a multilevel process by which organizations transform ideas into new/improved products/services or processes, to advance, compete and differentiate themselves successfully in their markets”.

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McAdam, Keogh, Reid and Mitchell (2007, p. 386) define innovation for the benefit of great expertise to customers, suppliers and something different.²

Innovative Micro, Small and Medium Enterprises (MSMEs): promote technology transfer; education development and management; Business development consulting services for SMEs; Develop an innovation support system at the national level; promote economic and technical cooperation between SMEs and large enterprises; Support the implementation/documentation of the management system; International market access and internationalization of MSMEs: encouraging the use of information technology in MSME business; Supports e-commerce and other formats such as online commerce; Strengthening the national capacity of MSMEs in international trade.³

So as a capital entrepreneur through KSPPS financing facilities, product and technology innovation are important determinants for the growth of MSMEs in Pekalongan City, the Creative City. Doing this research to measure how big the growth of MSMEs is, and to provide information for the Pekalongan city government to know that MSME growth is influenced by KSPPS financing, product and technology innovation. So it must be supported by the government so that the growth of MSMEs increases and the impact of the Pekalongan City economy grows and also contributes to national economic growth. So the author wants this research to be carried out to explain KSSPS Financing, Product and Technology Innovations as Determinants of the Growth of MSMEs in Pekalongan City.

RESEARCH METHOD

Theoretical Framework

From the theoretical basis, hypotheses, and the results of previous studies as stated above, the theoretical framework proposed for this research is as follows:

Research Method

1. Research methods

   This study uses descriptive analysis; this research approach is a quantitative approach with survey research in which the basic data from a sample of a population uses a questionnaire instrument.

2. Research Settings

   This research was conducted in Pekalongan City. This research was conducted for four months, from April to July 2020.

3. Research Variable

   1) Independent variable:
      a. KSPPS Financing (X1)
      b. Product Innovation (X2)
      c. Technology (X3)

   2) Dependent variable (Growth of MSMEs in Pekalongan City (Y1)).
4. **Population**

   In this research, the population of MSMEs in Pekalongan City is 100, the formula is slovin. And the result is 88.88 population.

5. **Method of Collecting Data**

   Collecting data of the research with the method used a closed questionnaire. The questionnaire was used to obtain respondent data regarding Kspps Financing, Product Innovation, Technology and MSME Growth in Pekalongan City. The data of this study were obtained through primary data and secondary data.

6. **Data Analysis**

   1) **Descriptive statistics**

   The processed data were analyzed using descriptive analysis of the frequency distribution table, Mean (average), Median (Me), Mode (Mo), and Standard Deviation (SD).

   2) **Analysis Prerequisite Test**: Normality, Linerity, Multicollinearity and Heteroscedasticity

   3) **Multiple Regression Test**

   Multiple Regression Formula:

   $$Y = a + b1X1 + b2X2 + b3X3 e$$

   4) **Hypothesis testing**: T test, F Test and Adjusted $R^2$

**RESULT AND DISCUSSION**

**RESULT**

**Description of Research Respondents**

Respondents in this study were entrepreneurs in Pekalongan City. The sampling technique in this research is simple random sampling. Sampling with this technique is done randomly doesn’t different of population this study. Research data was collected by distributing online questionnaires to respondents due to COVID-19 so they could not interact directly with respondents. Researchers obtained questionnaires by communicating directly with respondents through social media and providing questionnaire links to respondents to fill out.

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The distribution and collection of questionnaires were carried out in July – August 2020. Researchers distributed questionnaires according to the number of samples, namely 80 respondents. The statement in the questionnaire consists of two parts, namely a statement regarding the identity of the respondent and a statement regarding 3 independent variables consisting of KSPPS financing, product and technology innovation and the dependent variable, namely the growth of MSMEs.

The identity of the respondents in this study included gender, last education, type of business and length of business. The classification of respondents' identities is aimed at knowing the general description of respondents in this study. The general description of respondents can be described as follows:

a. Characteristics of Respondents by Gender

The data on the sex of the entrepreneur respondents in Pekalongan City who were sampled in this study are as follows: it can be seen that from 80 respondents, 36 respondents were male and 44 respondents were female. So the classification of respondents based on gender in this research is that there are more female respondents than male respondents, with a percentage of 55% female respondents and 45% male respondents.

b. Characteristics of Respondents Based on Last Education

The latest educational data of entrepreneur respondents in Pekalongan City which is the sample in this study are as follows: it can be seen that of the 80 respondents the largest percentage is 70%, namely respondents with the last education of SMA/SMK which there are 56 respondents. Respondents with the smallest percentage, namely 1.3%, that is, there is 1 respondent with the last education of junior high school. As for the last education of the other respondents, 7 respondents with the last education of elementary school with a percentage of 8.8%, 2 respondents with the last education of Diploma with a percentage of 2.5% and the last having Bachelor's education with a percentage of 14 respondents with a percentage of 17.5%.

c. Characteristics of Respondents by Type of Business

The data on the type of business of the entrepreneur respondents in Pekalongan City which became the sample in this study are as follows: it can be seen that from 80 respondents there are 26 types of businesses managed by respondents with the most type of business namely food business with 13 respondents which when presented is 16.3% while the least managed type of business there are several types of business such as: cakes, animal husbandry, agriculture, photography services, social media services, bridal makeup.
services, etc. with each respondent only having 1 respondent with a percentage of 1.3%.

d. Characteristics of Respondents Based on Length of Business

The data on the length of business of the entrepreneur respondents in Pekalongan City which became the sample in this study are as follows: it can be seen that the data used with the old method of business < 1 year with 23 respondents at a percentage of 28.8%, business duration 1-3 years with 30 respondents at a percentage of 37.5%, length of business 4-5 years with 9 respondents at a percentage of 11.3% and length of business with 15 respondents in percentage 22.5%. So it can be concluded that the largest percentage is in the length of business 1-3 years by 37.5% as many as 30 respondents and the smallest percentage is in the length of business 4-5 years at 11.3% with 9 respondents.

Data analysis

a. Descriptive statistics

The processed data were analyzed using descriptive analysis of the frequency distribution table, Mean (mean), Median (Me), Mode (Mo), and Standard Deviation (SD). Descriptive analysis can be described as follows: it can be seen that:

1) Mean (average)

The average of the three dependent variables from this study resulted in data that the average KSPPS financing (X1) was 19.34. Product innovation (X2) was 20.94 and Technology (X3) was 29.61. As for the independent variable, in this case, the growth of MSMEs (Y) has an average of 15.05.

2) Median (Me)

The median of the three dependent variables of this study resulted in data that the median of KSPPS financing (X1) was 20.00. Product innovation (X2) was 21.00 and technology (X3) was 29.50. As for the independent variable, in this case, the growth of MSMEs (Y) has a median of 15.00.

3) Mode (Mo)

The mode of the three dependent variables of this study produces data that the mode of KSPPS financing (X1) is 21. Product innovation (X2) is 25 and Technology (X3) is 24. As for the independent variable, in this case, the growth of MSMEs (Y) has mode by 15.
4) Standard Deviation (SD)

The standard deviation (SD) of the three dependent variables of this study resulted in data that the standard deviation of KSPPS financing (X1) was 3.345. Product innovation (X2) was 3.270 and Technology (X3) was 6.686. As for the independent variable, in this case, the growth of MSMEs (Y) has a standard deviation of 2.796.

b. Classic assumption test

1) Normality test

In this research, SPSS is used to test normality with the Kolmogorov Smirnov method with a significance level of 5%. Calibration with the Kolmogorov Smirnov: Asymp value. Signature. (2 tails) 0.200 i.e. 0.200 > 0.05, it can be concluded the survey data is normally distributed. The results of the normal test can also be seen in the normal probability graph as follows: the points are located on the diagonal and on the diagonal, so the data is normally distributed.

2) Linearity Test

Linearity test to know the relationship between the independent variable and the dependent variable.

The results show that the sig. deviation from linearity in the MSME growth variable and KSPPS financing is 0.923, then the MSME growth variable and product innovation is 0.128, and the MSME growth and technology is 0.106. Of the three sig. deviation from linearity gets results > 0.05, it can be seen of the independent variable has a relationship with the dependent variable.

3) Multicollinearity Test

Multicollinearity test to analysis in the regression model there is perfect correlation of the independent variables. The results of the four independent variables of the KSPPS financing (X1) of 0.996 and 1.005, product innovation (X2) of 0.870 and 1.150, and technology (X3) of 0.870 and 1.149. it can be seen there is no multicollinearity between the independent variables.

4) Heteroscedasticity Test

A perfect regression model is covariate or constant variance. Test the absence of variance in this study using the Spearman method. Whether or not there is a variable variance is known by testing the significance value of a variable. If the significance value > 0.05 then there
is no change in variance. The results of the variance test using the Spearman method and scatter plot can be seen in the table below: from above it can be seen that all significant values are above 0.05, namely KSPPS Tai support (X1) 0.82 > 0.05, product innovation. (X2) 0.757 > 0.05 and technology (X3) 0.788 > 0.05. Therefore, it can be concluded that there is no sign of variance.

c. Multiple Linear Regression Test

Based on the results of multiple linear regression estimation using SPSS, as follows:

\[ Y = 3.307 + 0.301X_2 + 0.184X_3 + e \]

\( Y = \) MSME Growth

\( \alpha = \) Constant

\( X_2 = \) Product Innovation

\( X_3 = \) Technology

1) The constant 3.307 shows that the independent variables of KSPPS Financing (X1), Product Innovation (X2), Technology (X3), are ignored, so the MSME Growth is 3.307. This is because there are influences from other variables besides KSPPS financing, product innovation, technology.

2) The coefficient of the KSPPS Financing variable (X1) is 0.000, with a significance level of 0.996 <0.05. So there is no relationship between the KSPPS Financing variable and the growth of MSMEs.

3) Product Innovation variable coefficient (X2) is +0.301, with a significance level of 0.000<0.05. Then there is a positive relationship between the product innovation variable and the growth of MSMEs. Each increase of 1 product innovation score will increase the growth of MSMEs by 0.301. The value of the regression coefficient on the product innovation variable is positive, meaning that if product innovation is getting better, it will increase the growth of MSMEs.

4) The technology variable coefficient (X3) is +0.184, with a significance level of 0.000<0.05. Then there is a positive relationship between the technology variable and the growth of MSMEs. Each increase in 1 technology score will increase the growth of MSMEs by 0.184 assuming that the other independent variables are constant. The value of the regression coefficient on the technology variable is positive, meaning that if the technology is getting better, it will increase the growth of MSMEs.
d. Hypothesis testing

1) t test

The following is the result of the t-test calculation in this study: that the tcount value of the KSPPS financing variable (X1) is -0.006 with a significant value of 0.996, the product innovation variable (X2) is 3.783 with a significant value of 0.000, and the technology variable (X3) is 4.734 with a significant value of 0.000. Each variable will be compared with the ttable value with df = N-k = 80-4 = 76, then the ttable is 1.665, so that from the t-test results in the table, the following results can be obtained:

2) The effect of the KSPPS financing variable hypothesis (X1) on the growth of MSMEs (Y)

The KSPPS financing variable (X1) has a tcount of -0.006, a t-table of 1.665, and a significant value of 0.996. This means that tcount (0.006) < ttable (1.665), and a significant value of 0.996 > 0.05, then H0 is accepted and Ha is rejected so that the KSPPS financing variable (X1) has no effect on the MSME growth variable (Y).

3) The effect of the product innovation variable hypothesis (X2) on the growth of MSMEs (Y)

The product innovation variable (X2) has a tcount of 3.783, a t-table of 1.665, and a significant value of 0.000. This means that tcount (3.783) > ttable (1.665), and a significant value of 0.000 < 0.05, then H0 is rejected and Ha is accepted so that the product innovation variable (X2) has a positive and significant effect on the MSME growth variable (Y).

4) The influence of the technology variable hypothesis (X3) on the growth of MSMEs (Y)

The technology variable (X3) has a tcount of 4.734, a t-table of 1.665, and a significant value of 0.000. This means that tcount (4.734) > ttable (1.665), and a significant value of 0.000 < 0.05, then H0 is rejected and Ha is accepted so that the technology variable (X3) has a positive and significant effect on the MSME growth variable (Y).

5) F test

The results of the f test can be fcount is 19.001 with a significant value of 0.000. In this study the number of n = 80, df1 = k-1 = 4-1 = 3, df2 = n-k = 80-4 = 76 then the value of fttable = 2.72. This shows that the value of fcount (19.001) > fttable (2.72) and a significant value of 0.000 > 0.05. This means that Ho is rejected and Ha is accepted, then the KSPPS financing variable (X1), product innovation (X2), and technology (X3)
simultaneously have a significant influence on the MSME growth variable (Y).

6) Coefficient of Determination Test (Adjusted R2)

The Adjusted R Square value is 0.406 which shows that the independent variables (KSPPS financing, product innovation, and technology) simultaneously contribute to the dependent variable (MSME growth) of 40.6% and the remaining 59.4% is influenced by the variable others that were not included in this study.

DISCUSSION

The discussion section will explain the relationship between variables partially or simultaneously based on data analysis that has been carried out using the SPSS application. The following is a discussion of research results from testing research hypotheses:

1. The influence of the KSPPS financing variable on the growth of MSMEs in Pekalongan City

Based on the analysis that has been done, the KSPPS financing variable (X1) has a tcount value of -0.006, a ttable of 1.665, and a significant value of 0.996. This means that tcount (-0.006) < ttable (1.665), and a significant value of 0.996 > 0.05, then H0 is accepted and Ha is rejected so that the KSPPS financing variable (X1) has no effect on the MSME growth variable (Y) in Pekalongan City.

That KSPPS financing has no influence on the growth of MSMEs in Pekalongan City, this is because most MSMEs in Pekalongan City choose to use personal capital or with credit at the Bank. In line with research. in his research said that it was difficult for MSMEs to get access to financing, thus hampering the growth and development of MSMEs.

Financing is analogous to capital. To build a business, of course, cannot be separated from the existence of capital. An entrepreneur must of course have capital to develop a business, be it personal capital or from financing at the bank. Using personal capital is an option to minimize the

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The influence of product innovation variables on the growth of MSMEs in Pekalongan City

Based on the results of the analysis, product innovation (X2) has a Tcount of 3.783, a T-table of 1.665 and a significance value of 0.000. This means that after Tcount (3.783) > Ttable (1.665) and a significant value of 0.000 < 0.05 then H0 is rejected and Ha is accepted, so that product innovation (X2) has a positive and significant effect on the MSME growth variable (Y) in Pekalongan City.

The product innovation has a positive and significant influence on the growth of MSMEs in Pekalongan City. From the results of the analysis, it can be interpreted that the better the product innovation that is carried out, the more consumers will pay attention to buying the product, which will certainly affect the growth of an MSME. Linder et al. (2003) defines innovation as applying new ideas to add value to a product. Product innovation is carried out to improve competitive strategies based on market desires. Product innovation really needs to be done at this time, the ever-changing trend requires entrepreneurs to innovative on their products to maintain stability and develop MSMEs. (Indah Parlina D, interview 20 August, 2020).

The influence of technology variables on the growth of MSMEs in Pekalongan City

Based on the analysis that has been done, the technology variable (X3) has a Tcount of 4.734, a T-table of 1.665, and a significant value of 0.000. This means that Tcount (4.734) > Ttable (1.665), and a significant value of 0.000 < 0.05, then H0 is rejected and Ha is accepted so that the technology variable (X3) has a positive and significant effect on the MSME growth variable (Y) in the City. Pekalongan.

Based on the analysis above, it is found that technology has a positive and significant influence on the growth of MSMEs. This is in line with research by Bayo M and Lera L, that technology can provide positive benefits and effectiveness to various businesses and organizations (Bayo-Moriones & Lera-López, 2007). The use of technology in MSMEs can support business operations more easily and can improve business performance. Social media including information technology has contribution of marketing. The use of

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social media makes it easier for MSMEs to introduce and market products more broadly to consumers (Rani Agustin, interview, August 26, 2020).

4. The influence of KSPPS financing variables, product innovation, and technology on the growth of MSMEs in Pekalongan City

Based on table 4.15 fcount are 19.001 with a significant value of 0.000. In this study the number of n = 80, df1 = k-1 = 4-1 = 4, df2 = n-k = 80-4 = 76 then the value of ftable = 2.72. This shows that the value of fcount (19.001) > ftable (2.72) and a significant value of 0.000 > 0.05. This means that H₀ is rejected and H₁ is accepted. Then the KSPPS financing variable (X1), product innovation (X2), and technology (X3) simultaneously have a significant influence on the MSME growth variable (Y) in Pekalongan City. As a capital entrepreneur through KSPPS financing facilities, product and technology innovation is an important determining for the growth of MSMEs in Pekalongan City, the Creative City. The research by Lasmininingsih, et al in 2018 that after being tested simultaneously these three factors had a major influence in helping increase the growth of MSMEs (Lasminiasih, Utomo, and Nurdianto, 2018). So that MSMEs are advised to use technological means and innovate their products with the help of capital, for example from KSPPS financing in supporting the business they run.

CONCLUSION

The results of the analysis and discussion above, it can be concluded as follows: The KSPPS financing variable has no effect on the growth of MSMEs in Pekalongan City with t count -0.006 < t table: 1.665, total significance 0.996 > 0.05. The positive product innovation variable on the growth of MSMEs in Pekalongan City with t count (3.783) > t table of 1.665, and a total significance of 0.000 <0.05. The technology variable has a positive effect on the growth of MSMEs in Pekalongan City with a comparison of t count (4.734) > t table (1.665), and a significant total of 0.000 <0.05 And so simultaneously KSPPS financing, product innovation, and technology have an effect on the growth of MSMEs in Pekalongan City as evidenced by the results of the fcount 19.001 > f table of 2.72 and a significant value of 0.000 < 0.05.

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Nur Fani Arisnawati:
KSPPS Financing, Product Innovation, and Technology as Determinants


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