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# Analysis of Factors Affecting: Sales Volume of Small and Medium Enterprises (SMEs) in Surabaya

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**Abstract**

The purpose of this study is to investigate and examine the factors that affect the sales volume SMEs, respondent 101 SMEs obtained that variable Venture Capital (X1) Number of Workers (X2), Hours of Work (X3), Experience (X4) of the Sales Volume (Y), simultaneously influence while variable Production technology and Innovation (X5) and Strategic Marketing (X6) of the Sales Volume (Y) partially has dominant influence.

The research instrument used questionnaire, were analyzed using multiple linear regression analysis. The unit of analysis of this research is the management of SMEs Surabaya, who became the target Cooperatives and SME Surabaya in 2013 as many as 315 SMEs engaged in some business sectors such as the following: Handicraft (39), Sewing (16), Handicraft Water Hyacinth (38), ribbon embroidery (44), Processed fish (29), Pastry (50), Wet Cake (50) Beverages (26), crackers (37). In this study took a sample of 101 respondents from various fields of business data analysis contained significant effect on the dependent variable, and the result is expected to be used as one of the considerations in making decisions in developing SMEs.

**Keywords:** factors of sales volume, SMEs

## 1. Introduction

National small and micro enterprises in indonesia amounted to about 52.1 million to contribute in gross domestic product ( GDP ) by 33% and created employment 91.03%. (Grisna Anggadwita & Qaanita Yuuha Mustafid, 2013) Rather large businesses which amounted to only 4,677 or 0.01% of total company and absorb employee only 2.70% of GDP would be able to contribute quite high, at 43.47%. Contributions to non-oil exports of the highest large enterprises, namely 82.96. Medium-sized business sector of its business units as many as 41 133 units. Contribution to employment, ie, 21.7% and 13.47% of GDP. Small businesses as much as 546 567 units or 1.04 %. whereas on employment of 3.56 % , 9.96% of GDP and 3.87% of non-oil exports. (Choirul Anam, 2012). Based on these data , it can be said that SMEs make a major contribution in contributing to the country's economic growth ( Nunuy Nur Afiah, 2009).

Data Department of Cooperatives and SMEs in Surabaya, there are resources that SMEs of potential for development of SMEs in 2010 there were 977; In 2011 there were 547 SMEs and in 2012 there were 489 SMEs from these data the number of SMEs has decreased because it is necessary to prevent their troubled SMEs causing some SMEs experience liquidation/folded. Surabaya government through the Department of Cooperatives and SMEs have to provide guidance on business/small industry sector in order to survive and expanded so can help the growth of the economy and address the employment issues but these efforts have not fully succeeded in developing SMEs.

Several studies from other countries, economic development in a country (Mazzarol, Volery, Doss, & Thein, 1999). One of the important role of SMEs in this context include poverty alleviation through employment creation. SMEs in some other countries such as Thailand are increasingly seen as a creator of new jobs (Swierczek & Ha, 2003) and SME Vietnam has hired 64% of the industrial workforce, Thailand statistical data provided by the NSO (2007), said SMEs accounted for 76.1% percent of all companies in the manufacturing sector in 2007. the largest concentration, with the number of SMEs in Thailand are in the sectors of food and beverages, textiles, wearing apparel, and wood and wood products (NSO, 2007).

Most studies ignore gender as a variable attention or excluded female subjects of their design. It is usually that men and women have a performance impact on the company, as this effect has been understood, factors that affect the presentation of gender that has not been fully clarified (Brush & Hirsch, 2000) although gender has an impact in the middle of the operator small-scale enterprises in the sector companies scale little understood as an integral constituent of the commercial progress and important agent in his power to lift the country out of poverty (Wolfensohn, 2001). The small scale companies have the power to commercial development, conception of work, and poverty reduction in developing countries. They have roads in that commercial development acceleration and rapid development has been achieved (Francis, 2000). Besides small-scale enterprises has been understood as the ability of the feeder for large-scale industry (Wolfensohn, 2001).

*1.1 Research Problems*

1 ) Is the business capital , the amount of labor , business experience , technology and production innovation and marketing strategy , simultaneously affecting an increasing volume of sales of SMEs in Surabaya?

2 ) Among the factors working capital, the amount of labor, business experience, technology and production innovation and marketing strategy where the dominant influence on the increase of sales volume of SMEs in Surabaya?

## 2. Literature Review

(Bridge, O'Neill, & Cromie 2003; Salminen, 2000) describe a company as a controlled system consists of detectors, voters and effectors. the detector is a function of where the system to obtain information about its environment, which is then used as the basis for the selection of behavioral responses by voters. Finally, run by the behavior of effectors. The measurement system of a company collects information about the changes in both the environment and the company's performance. This information is then used together with the values and preferences of the company and management to make decisions about actions needed. The output of the company - product, service, operational and financial performance Performance - changed.

One of the main problems that arise when dealing with SMEs is the lack of clear and universally accepted definition. Attempts to define SMEs have led to a tremendous diversity of conception actually generated debate about different approaches to define SMEs. Companies differ in their level of capitalization, sales, and employment. Varieties definitions have been applied between different countries and different criteria have to be considered to determine them. But generally, SMEs are considered non-independent subsidiaries employing less than the amount provided by the employee though this varies in each country. For example, in Scotland, a company Micro unbiased 0-9 employees (including sole traders) and 10-49 Small employees. mostly small companies are considered companies with less than 50 employees while micro-enterprises have at most ten, or in some cases, five employees (Malhotra, Chen, Criscuolo, Fan, Hamel, & Savchenko, 2006). In defining SMEs, in addition to considering the number of employees involved in the business, financial aspects such as turnover and total assets or total balance sheet is also taken into account.

(Joseph F. Engelberger, ....) said that innovation requires only three things:

1. unknown needs, 2. The competent persons with relevant technology, finance and 3. Support. Innovation by businesses is achieved in many ways, with a lot of attention now given to formal research and development for "breakthrough innovations". But innovation can be developed by less formal modification of on-the-job practice, through exchange and combination of professional experience and with many other routes. Innovation is more radical and revolutionary tend to emerge from R&D, while more additional innovations may emerge from practice - but there are many exceptions to each of these trends

A recent study based survey of the factors that influence the success of SMEs. (Nurul Indarti & Marja Langenberg, 2005) have identified a key component to be important in analyzing the success of the SME business which includes the characteristics of the entrepreneur; the characteristics of SMEs; and contextual elements of SME development. (Westhead, 1995) studied the factors that influence the survival of 227 high-tech small companies. (Ghosh & Kwan, 1996) conducted a cross-national study of the cross key success factors of 152 SMEs in Singapore and 164 SMEs in Australia. (Kauranen, 1996) conducted a follow-up study of 37 new manufacturing company in Finland and studied the determinants of the future success of the company in the short term and in the long term. (Joseph, 1995) explored the critical success factors for small companies in several industry sectors based on employers' perceptions of 220 South Pacific. (Wijewardena & Cooray, 1996) explored the importance of a series of factors of success by studying a sample of 300 small manufacturing companies in Japan. (Gadenne, 1998) examined the effects of various management practices on the performance of small company by studying 369 small businesses in the retail, service and manufacturing industries in Australia. (Bracker & Pearson, 1986)

studied planning and financial performance of mature small dry cleaning business. (Bracker et al., 1993) planning study in successful high-growth small companies. (Pelham, 2000) explores the relationship between market orientation and performance of manufacturing SMEs in eight industry sectors.

Based on the findings of previous studies, the factors that influence the success of the SME business is classified into the following categories: (1) an employer characteristics (Kristiansen, Furuholt, & Wahid, 2003; Rutherford & Oswald, 2000), (2) the characteristics of SMEs (Kristiansen, Furuholt, & Wahid; 2003), (3) management and know- how (Swierczek & Ha, 2003), (4) products and services (Wiklund, 1998; Hitt & Ireland, 2000). (5) customer and market (William, James, & Susan, 2005), (6) ways of doing business and cooperation (Hitt & Ireland, 2000; and Jarillo, 1988). (7) and financial resources (Swierczek & Ha, 2003; Kristiansen, Furuholt, & Wahid, 2003). (8) the strategy (McMahon, 2001), (9) the external environment (Huggins, 2000; Nurul Indarti & Marja Langenberg, 2005); and (10) internet (Henriette Hesselmann, Comcare, & Peter Bangs; 2002). However, only six factors: Characteristics of SMEs, and knowledge management, Products and Services, the Way of Doing Business and Cooperation, Resources and Finance and External Environment considered for the theoretical framework of this research is based on compliance with the Malaysian context. Therefore, business success is dependent variable and the independent variables are: the characteristics of entrepreneurs and SMEs, management and know - how, products and services, ways of doing business and cooperation, and financial resources, and the outside environment.

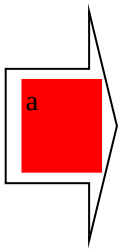
Thus, the empirical investigation of the factors that led to the success and failure of a small business economy in different countries is a mandatory requirement for the development of better economic health. The findings were helpful and useful for individual entrepreneurs as well as economic development planner (Wijewardena & Tibbits, 1999). Assuming that there tends to be a common underlying factors associated with success (Hills & Narayana, 1990), many small business research has been conducted to identify the success factors in various countries. However, Luke (1996) states that the majority of previous studies based on the experience of a small company that operates both in North America or in the European countries. There has been a tremendous amount of research ranging from single case study for a comprehensive survey that explicitly investigate the success factors for small businesses (see, for example, Bird, 1989; Brockhaus & Horwitz, 1982; Brockhaus & Horwitz, 1986; Gartner, 1989; Sandberg, 1986; Vesper, 1990). Most of these studies concluded that business success is a result of the web interacting factors. However, the implementation and effectiveness of these factors in many countries is still open to investigation.

One of the main challenges in doing cross-country analysis of data of SMEs is the lack of a universal definition of what constitutes an SME. A number of efforts aimed to streamline and harmonize the definition of SMEs (OECD, 2004), despite the heterogeneity of SMEs themselves and the nature of the economies they operate in may mean that establishing a global definition is not feasible. We discuss the existing definition of SMEs below and explore the extent to which differences in definitions associated with the observed variation in the level of SME financing

## 3. Research Methods

### *3.1 Research Design*

To obtain the results of the research in accordance with the goals set before the design of the study are presented in the figure below:

<table>
<tr><td>Identification of variables and variable</td><td>Data analysis</td><td>superficial</td></tr>
<tr><td>Independent Variable ( X ) :</td><td></td><td></td></tr>
<tr><td>1. Venture capital consists of :<br>the amount of asset ownership , spacious building / construction , business location , access to the outside</td><td rowspan="5"> 
</td><td rowspan="5">Factors that influence the salrs volume SMEs</td></tr>
<tr><td>2. The number of workers consists of : Number of labor , Job descriptions ; Specifications jobs</td></tr>
<tr><td>3. Working hours consist of : work schedule Business experience consisted of , the Old business; business field</td></tr>
<tr><td>4. Technology and innovation of production consists of : the model ,size , color, quality products; product specification</td></tr>
<tr><td>5. The marketing strategy consists of : Network marketing ; Promotional products Professional organization , equipment / media promotion , distribution channels</td></tr>
</table>

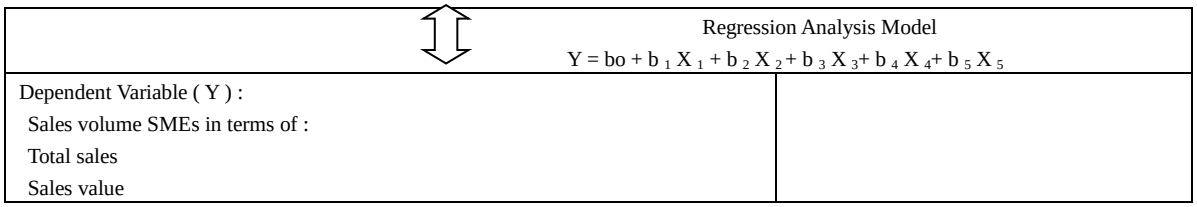



Figure 1. Flow chart research

*3.2 Population and Sample*

The unit of analysis of this research is the management of SMEs Surabaya, who became the target Cooperatives and SME Surabaya in 2013 as many as 315 SMEs engaged in some business sectors such as the following: Handicraft (39), Sewing (16), Handicraft Water Hyacinth (38), Sulam Pita (44), Processed fish (29), Pastry (50), Wet Cake (50), Beverages (26), crackers (37). In this study took a sample of 101 respondents from various fields of business

*3.3 Research Variable*

The variables analyzed in this study grouped as follows

Exogenous or independent variable in this study is the business capital, number of employees, hours of work, business experience, technology and innovation as well as the production, marketing strategies yield Surabaya Endogenous or dependent variables are factors that predicted by a single or multiple constructs. Endogenous variable in this study is. The sales volume of SMEs

*3.4 Operational Definition of Variables*

The operational definition of each variable is presented in Table 2 below:

Table 2. The operational definition of each variable

| Variable | Variable name | Operational definition |
|---|---|---|
| | The sales volume ( Y 1 ) | • Total sales volume ( Y2.1 ) |
| Dependent variables | | • Sales volume ( Y1.2 ) |
| | Venture capital ( X1 ) | • The number of asset ownership ( X1.1 ) , |
| independent variables | | • Size of the building / buildings ( X1.2 ) , |
| | | • The business location ( X1.3 ) , |
| | | • Access to the outside ( X1.4 ) , |
| | Number of Manpower (X2) | • The number of workers ( X2.1 ) |
| | | • Job Description X2.2 ) |
| | | • Job specifications ( X2.3 ) |
| | Working hours ( X3 ) | • Work schedule ( X3.1 ) |
| | | • The business sectors ( X3.2 ) |
| | Business experience ( X4) | • Old business ( X 4.1 ) |
| | Technology and innovation in | • the model , size , ( X5.1 ) |
| | production ( X5 ) | • Color , ( X5.2 ) |
| | | • the quality of the product ( X5.3 ) |
| | | • specifications of the product ( X5.4 ) |
| | Marketing strategy ( X6 ) | • Network marketing ( X 6.1 ) |
| | | • Promotional products ( X 6.2 ) |
| | | • Professional organizations ( X 6.3 ) |
| | | • Tools / media promotion ( X 6.4 ) |
| | | • distribution channels ( X 6.5 ) |

*3.5 Data Analysis Techniques*

For the sake of discussion, the data is processed and presented based on statistical principles with analysis and hypothesis testing used inferential statistics using linear regression analysis with the formula:

$$Y = bo + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5$$

$Y_1 =$ The sales volume

$X_1$ = venture capital

$X_2$ = total manpower

$X_3$ = working hours

$X_4$ = trying experience

$X_5$ = technology and innovation in production

$X_6$ = marketing strategy

*3.6 The Results Achieved*

Surabaya municipality is composed of 31 districts and 160 district. The data from the Department of Cooperatives and SMEs Surabaya city has 315 SMEs assisted consist of: Handicraft (39), Sewing (16), Handicraft Water Hyacinth (38), Sulam Pita (44), Processed fish (29), Pastries s (50), wet Cake (50) Beverages (26), crackers (37).

In this study took a sample of 101 respondents from various fields of business:

Table 3. Samples distribution

| NO. | business fields | amount | NO. | business fields | amount |
|---|---|---|---|---|---|
| 1 | Handycraft | 12 | 6 | cake | 17 |
| 2 | ribbon embroidery | 9 | 7 | crackers | 8 |
| 3 | processed fish | 21 | 8 | stitches shirt | 7 |
| 4 | drink | 4 | 9 | Water hyacinth | 6 |
| 5 | pastry | 17 | | | |
| | amount | | | | 101 |

Source: Department of Cooperatives and SMEs Surabaya (processed).

*3.7 Data Analysis and Discussion*

Based on data collection through questionnaires , the study aims to determine the effect of variable Y in the form of higher sales volume and variable X consisting of X1 = venture capital, X2 = the number of workers , X3 = hours of work, X4 = experience trying, X5 = technology and production innovation , and X6 = marketing strategies through multiple linear regression analysis with assistance program SPSS Statistics obtainable results as follows.

*3.8 Testing Instrument Research*

3.8.1 Validity Test

Test the validity of the questionnaire obtained by each score indicators correlate with the total score of the indicator variable, then the correlation results than the critical value at 0.05 significant level. If the analysis shows the significant value exceeding 0.05 (> 0.05), the items in the questionnaire did not show the validity of the value that it can not be continued as a research instrument .

Validity test is done using the product moment correlation, (r count) compared with Pearson Correlation requirement if it is larger than the critical r 0.300 matter the item is considered eligible for band is used as an instrument and vice versa (Nata Wirawan, 2002). From the analysis of the data obtained the following results:

Table 4. Validity

| No questionnaire | r amount | t requirement | information |
|---|---|---|---|
| 1 | 1 | > 0,300 | Item matter Valid |
| 2 | .356** | > 0,300 | Item matter Valid |
| 3 | .687** | > 0,300 | Item matter Valid |
| 4 | 1,000 | > 0,300 | Item matter Valid |
| 5 | 1,000 | > 0,300 | Item matter Valid |
| 6 | ,133 | > 0,300 | tem matter Valid |
| 7 | .534** | > 0,300 | Item matter Valid |
| 8 | .421** | > 0,300 | Item matter Valid |
| 9 | .395** | > 0,300 | Item matter Valid |
| 10 | 1 | > 0,300 | Item matter Valid |

| | | | |
|---|---|---|---|
| 11 | .388** | > 0,300 | Item matter Valid |
| 12 | .479** | > 0,300 | tem matter Valid |
| 13 | .606** | > 0,300 | Item matter Valid |
| 14 | .367** | > 0,300 | Item matter Valid |
| 15 | .353** | > 0,300 | Item matter Valid |

Source: data analysis.

### 3.8.2 Test Reliability

Reliability test is intended to determine the consistency of measuring instruments in use , or in other words the instruments have consistent results when used repeatedly at different times (Nata Wirawan, 2002). Reliability test results as the table below:

Table 5. Reliability testing results

| Variable | Minimum limit | information |
|---|---|---|
| Venture capital (X1) | 0.700 | |
| JTK(X2) | 0.700 | |
| Working hours (X3) | 0.700 | |
| experience (X4) | 0.700 | |
| Tehcnology (X5) | 0.700 | |
| Strategy market (X6) | 0.700 | |

Source: data analysis.

### 3.8.3 Classic Assumption Test

#### 3.8.3.1 Normality Test Data

Normality test can be done in two ways . Namely the “Normal P - P Plot” and “Table Kolmogorov Smirnov”. The most commonly used is Normal P-P.

From the analysis of the curve can be seen that the data is spread around the diagram and follow the regression model so that it can be concluded that the processed data is the data so that the normal distribution normality test is met .

#### 3.8.3.2 Test Multicolinearity

This test aims to test whether the regression model found a correlation between independent variables (independent). A good regression model should not happen correlation between the independent variables. If the independent variables are correlated then these variables are not orthogonal (Ghozali, 2006) For analysis with SPSS output we see the results in the table “Coefficients”. As in the following table:

Table 6. Test multicolinearity

| Variable | VIF amount | value Regression | Interpretation |
|---|---|---|---|
| Sales volume ( Y ) | - | VIF < 10, | Variable Dependent |
| Venture capital (X1) | 1.653 | VIF < 10, | not happen multikolinearitas |
| The number of workers(X2) | 1.108 | VIF < 10, | not happen multikolinearitas |
| Working hours (X3) | 1.769 | VIF < 10, | not happen multikolinearitas |
| Business experience (X4) | 1.311 | VIF < 10, | not happen multikolinearitas |
| Technology and innovation in production (X5) | 1.243 | VIF < 10, | not happen multikolinearitas |
| Marketing strategy (X6) | 1.214 | VIF < 10, | not happen multikolinearitas |

Source: Results of the data analysis.

From the results of the output data obtained that the value of all VIF < 10 This means that not happen multicoloniarity. And concluded that the test multicoloniarity met.

3.8.3.3 Test Heteroskidastity

This test is used to see if the confounding variables have the same variant or not (Ghozali, 2006). From the analysis it can be seen that does not happen heteroskedastisity because no clear pattern as well as the points spread above and below the number 0 on the Y axis so that it can be said heteroscedasticity test is met test Autocorrelation.

Autocorrelation test is a test of the assumptions in the regression where the dependent variable is not correlated with itself. To analyze them using SPSS output before we look at the table "Model Summary". such as the following:

Table 7. Test autocorrelation

| Modle | Amount Durbin-Watson | number Durbin-Watson (α) | Interpretation |
|---|---|---|---|
| Regression | 1.252 | -2 to+2 | no autocorrelation |

Source: Analysis of data.

From the above table values obtained Durbin - Watson (DW count) of 1,252. Based on predetermined criteria DW count is between -2 and 2 , ie $-2 \leq 2 \leq 2$ then this means no autocorrelation. So the conclusion is the autocorrelation test is met. Based on the results of various kinds of tests can be concluded that the requirements have been met all the classical assumption that the data analysis using multiple regression equation to do.

3.8.3.4 Multiple Linear Regression Analysis

Multiple linear regression analysis was used to determine whether there is influence of the independent variable on the dependent variable.

Table 8. Regression analysis

| Variable | value Regression | Interpretation |
|---|---|---|
| Sales volume ( Y) | 14,563 | Positive influence on the variable x |
| Venture capital ( $X_{1)}$ | -0.033 | Positive influence on the variable y |
| The number of workers ($X_{2)}$ | - 0.371 | Positive influence on the variable y |
| Working hours ($X_3$) | -.0. 307 | Positive influence on the variable y |
| Business eksperience ($X_4$) | 0.061 | Positive influence on the variable y |
| Tehcnology and innovation in production ($X_5$) | 0..209 | Positive influence on the variable y |
| Marketing strategy ($X_6$) | 0.146 | Positive influence on the variable y |

Source : Analysis of data.

Based on the above table can be obtained regression formula as follows :

$$Y = 14.563 - 0.033\ X_1 - 0.371\ X_2 - 0.307\ X_3 + 0.061\ X_4 + 0.209\ X_5 + 0.146\ X_6 + \varepsilon$$

*3.9 Interpretation of the Results of the Regression Analysis above Are as Follows*

1). The constant, this means that if all variables have a value of zero (0) then the value of the dependent variable (sales volume) amounted to 14 563.

2). Venture Capital (X1) to Sales Volume (Y), the coefficient value for the variable X1 Business Capital amounted to - 0.033. This shows that the Venture Capital have a relationship in the opposite direction (negative) with a Sales Volume or imply that any increase in Venture Capital one unit then the variable Sales Volume (Y) will be decreased by 0033, assuming that the independent variables other than the regression model is permanent.

3). Number of Workers (X2) on the Sales Volume (Y), Coefficient of Total Workforce for X2 of - 0.371. This shows that the amount of Labor have a relationship in the opposite direction to the sales volume or imply that any increase in Total Labor one unit then the variable Sales Volume (Y) will be decreased by 0371, assuming that the independent variables other than the regression model is fixed ,

4). Hours of Work (X3) on Sales Volume (Y), Working Hours coefficient value for the variable X3 for - 0307. This indicates that the Working Hours have a relationship in the opposite direction to the sales volume or implies that each increase of one unit of the Working Hours Sales Volume variable (Y) will be decreased by 0307 assuming that

the other independent variables from the regression model is fixed.

5). Experience (X4) of the Sales Volume (Y), the coefficient value for the variable X4 experience of 0061. This implies that every increase of one's experience, the unit sales volume variable (Y) will increase by 0061 under the assumption that the other independent variables from the regression model is fixed.

6). Technology and Innovation Prod. (X5) on Sales Volume (Y), coefficient of Technology and Innovation Prod. for variable X5 for 0209. This implies that any increase in Technology and Innovation Prod. one unit of the variable Sales Volume (Y) will increase by 0209 under the assumption that the other independent variables from the regression model is fixed.

7). Marketing Strategy (X6) of the Sales Volume (Y).

The coefficient value for the variable X6 Marketing Strategies for 0146. This implies that each increase of one unit of the Marketing Strategy Sales Volume variable (Y) will increase by 0146 under the assumption that the other independent variables from the regression model is in line with research in Imam Syarif Hidayat (2008).

*3.10 Hypothesis Testing*

3.10.1 T Test

Hypothesis testing is done by using t tests were used to determine whether the independent variables partially real effect or not on the dependent variable. The degree of significance used was 0.05. If the value is significantly smaller than the degree of confidence then we accept the alternative hypothesis, which states that a partially independent variables affect the dependent variable. T test analysis is also seen from the table "Coefficient". T test analysis is also seen from the table "Coefficient".

Table 9. Coefficient

| Variable | value significant | Extentf significant(α) | Interpretation |
|---|---|---|---|
| Sales volume ( Y) | 0.000 | 0.05 | -- |
| Venture capital ( $X_1$) | 0.786 | 0.05 | Var. ( $X_1$) ) is not significant to the variable y |
| Total manpower ($X_2$) | 0.047 | 0.05 | Var. ($X_2$) significant to the variable y |
| Working hours ($X_3$) | 0,196 | .0.05 | Var. ($X_3$ ) is not significant to the variable y |
| Trying experience ($X_4$) | 0.692 | 0.05 | Var. ($X_4$) is not significant to the variable y |
| Technology and innovation in production ($X_5$) | 0,000 | 0.05 | Var. ($X_5$) significant to the variable y |
| Marketing strategy ($X_6$) | 0.041 | 0.05 | Var. ($X_6$) significant to the variable y |

Source: Analysis of data.

Based on t test results can be said that:

1). Business Capital (X1) to Sales Volume (Y)

H0: Venture Capital (X1) no significant impact on sales volume (Y);

H1: Venture Capital (X1) significantly affects Sales Volume (Y).

0786 sig value is greater than the degree of significance (α) 0.05 then the decision could be made that H0 failed rejected. It can be concluded that the Venture Capital (X1) no significant impact on sales volume (Y). it is not in line with the research Fenny Lianti (2011), Chuthamas Chittithaworn; 2011 and Javed Mahmood Jasra (2011), Taufiq (2006).

2). Number of Workers (X2) on the Sales Volume (Y)

H0: Number of Workers (X2) no significant impact on sales volume (Y);

H1: Number of Workers (X2) significantly affects Sales Volume (Y).

0047 sig value is smaller than a significant degree (α) 0.05 then the decision could be made that H0 is rejected. It can be concluded that the amount of Labor (X2) significantly affects Sales Volume (Y) .It is step by Deepak K. Datta and Grisna Anggadwita, Qaanita Yuuha Mustafid (2014).

3). Working Hours (X3) on Sales Volume (Y)

H0: Hours of Work (X3) no significant impact on sales volume (Y);

H1: Working Hours (X3) significantly affects Sales Volume (Y).

0196 sig value is greater than the degree of significance (α) 0.05 then the decision could be made that H0 failed rejected. It can be concluded that the Hours of Work (X3) no significant impact on sales volume (Y). it is contrary to the study of Berchman Prana Sasmita et al.

4). Experience (X4) of the Sales Volume (Y)

H0: Experience (X4) no significant impact on sales volume (Y);

H1: Experience (X4) significantly affects Sales Volume (Y).

0682 sig value is greater than the degree of significance (α) 0.05 then the decision could be made that H0 failed rejected. It can be concluded that the experience (X4) no significant impact on sales volume (Y). this is in line with research Kladiola Gjini and not sejaan with research Firdouse Rahman Khan (2014)

5). Technology and Innovation Production. (X5) on Sales Volume (Y)

H0: Production Technology and Innovation. (X5) no significant impact on sales volume (Y);

H1: Technology and Production Innovation. (X5) significantly affects Sales Volume (Y), 0.000 sig value is smaller than a significant degree (α) 0.05 then the decision could be made that H0 is rejected. It can be concluded that the Technology and Innovation Production. (X5) significantly affects Sales Volume (Y). This is in line with Chuthamas Chittithaworn (2011) and Fat Sukarno (2009), and Bramuel Kitisha Kedogo (2013), Dimitrios Buhalis, Hilary Main; (1998), and Grisna Anggadwita,, Qaanita Yuuha Mustafid (2014).

6). Marketing Strategy (X6) of the Sales Volume (Y)

H0: Marketing (X6) no significant impact on sales volume (Y);

H1: Marketing (X6) significantly affects Sales Volume (Y).

0041 sig value is smaller than a significant degree (α) 0.05 then the decision could be made that H0 is rejected. It can be concluded that the Marketing Strategy (X6) significantly affects Sales Volume (Y). This is in line with research Chuthamas Chittithaworn (2011), Mohammed S, Zahurul Alam, Md. Ifttekhar Arif (2013) and not in line with the research Veronica Sri Lestari, (2005).

3.10.2 Test F

F test used to determine whether the independent variables simultaneously significant effect on the dependent variable. Confidence level used was 0.05. If the F value calculation result is greater than the value F according to the table then the alternative hypothesis, which states that all independent variables simultaneously significant effect on the dependent variable.

Tabel 11. Uji F

| Modle | value F | degree of confidence (α) | Interpertationi |
|---|---|---|---|
| Regression | 9.558 | 0.05 | Variable X together influential variable y |

Source: Analysis of data.

Based on the above results , the hypothesis proposed reads:

H0: Venture Capital (X1), Total Labor (X2), Hours of Work (X3), Experience (X4), Technology and Innovation Prod. (X5), Marketing Strategy (X6) no significant impact on sales volume (Y).

H1: Venture Capital (X1), Total Labor (X2), Hours of Work (X3), Experience (X4), Technology and Innovation Prod. (X5), Marketing Strategy (X6) significantly affects Sales Volume (Y), From the table values obtained Fhitung 9558 with a probability value (sig) = 0.000. sig. smaller than the probability value 0.05 or value 0.000 < 0.05; then H0, H1 means together (simultaneously) Venture Capital (X1), Total Labor (X2), Hours of Work (X3), Experience (X4), Technology and Innovation Prod. (X5), Marketing Strategy (X6) significantly affects Sales Volume (Y**)**.

The coefficient of determination ($R^2$).

The coefficient of determination used to determine how much the relationship of multiple variables within the meaning clearer. The coefficient of determination will explain how big a change or variation of a variable can be explained by changes or variations in other variables in the sense that the ability to contribute to the independent variable fixed variable in units of percentage. This coefficient values between 0 and 1 , if the result is closer to the

number 0 means the ability of the independent variables in explaining the variation of variables is very limited. But if the result of close to 1 means that the independent variables provide almost all the information needed to predict the variation of the dependent variable.

Table 12. Koefisien determinasi ($R^2$)

| Modle | nilai R | nilai R Square | Interpretation |
|---|---|---|---|
| Regression | .616[a] | .379 | Variabel X weak effect was variable y |

Sumber: Hasil Analysis data.

Based on the table above it can be concluded that the Venture Capital (X1), Total Labor (X2), Hours of Work (X3), Experience (X4), Technology and Innovation Prod. (X5), Marketing Strategy (X6) effect amounted to 37.9 % of the sales volume (Y), in other words the effect is weak, whereas 65.1% influenced by other variables not studied. Because adjusted R Square tend to approach a value of 0 , it can be concluded capability independent variables in explaining the variation of variables is very limited.

## 4. Conclusions and Recommendations

### *4.1 Conclusion*

1). Answering the research problems which reads: venture capital, workforce, and business experience, technology and production innovation, marketing strategies increased the sales volume of SMEs in Surabaya, then based on the results of data analysis can be concluded that the Venture Capital (X1), Total Power Work (X2), Hours of Work (X3), experience (X4), Technology and Innovation Prod. (X5), Marketing Strategy (X6) effect amounted to 37.9% of the sales volume (Y), whereas 65.1% influenced by other variables not studied. Because adjusted R Square of 37.9% likely to approach a value of 0, it can be concluded that the ability of the independent variables influence was the dependent variable. These results are consistent research conducted by Amirina, Nur Annisa (2011), Rizki Herdiansyah (2013) and Lew Perren, (1999). These results are consistent research conducted by Werner H. Hoffmann, Roman Schlosser (2001), but not sejaan by Dimitrios Buhalis, Hilary Main, (1998).

2). Among the factors working capital, number of employees, hours of work and business experience, production technology, product innovation, marketing strategy where the dominant influence on the increase of sales volume of SMEs in Surabaya? .Based on Data analysis Coefficient of Technology and Innovation Prod. for variable X5 for 0209, it can be said that the Technology and Innovation Production dominant influence on the sales volume. These results are consistent with research conducted by Made Saryawan1, Sudirman and I Wayan G W Murjana Yasa.

### *4.2 Suggestion*

Based on the results of data analysis studies were obtained in the field it can be be given advice follows:

1) To promote SMEs in the city of Surabaya needed technology and product innovation, so that SMEs can produce products that have a high innovation touch of art production so it can be preferred by consumers, which in turn enables high sales volume.

2) Necessary for innovation in product marketing strategies in order to have competitiveness against products from other businesses.

3) Need for assistance on SMEs to be able to use strategies in marketing their production through the existing media, especially the accessible broadly in the hope enables high sales voleume.

## 5. Limitations of the Study

Samples are limited in number to the research needs to be expanded sample selanjtnya.

The research variables can be added to make it more complete results.

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