Measurement of Entrepreneurial Motivation and Products Innovation in Pottery Crafts Business Development as Supporting Cultural Tourism

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Abstract

Pottery industry plays strategic roles in improving the local economy, especially in the use of labor. It is certainly worth to get the attention of various parties concerned of the existence of small and medium industries that play roles big enough in supporting the national economy. Even the pottery craftsmen are already reaching the international market, but the management of this business is still done simply, even from institutional aspects. Therefore, the local community needs the roles of college that can be used as partners to improve technical capabilities and management, and bond strengths together to form groups a solid effort to strengthen its bargaining position in the dynamic global marketplace. The main objective of this study is to determine the entrepreneurial behavior and innovation; get the data patterns of entrepreneurship and innovation to the development of the craft industry; the creation of a business coaching model in the pottery industry in Province West Nusa Tenggara; and published results of this study in a scientific journal. The population in this study is all entrepreneurs in the pottery industrial center in Province West Nusa Tenggara. Analysis of the data used is descriptive statistical analysis and inference using path analysis through simple regression analysis. The results showed that entrepreneurial motivation has a significant influence on business development. Entrepreneurial motivation has a significant influence on product innovation. And product innovation has a significant influence on business development. The right model in this study is direct influence model, which can be said that the motivation and innovation can be a stand-alone variable influencing the pottery business development.

Keywords

Pottery Craft Industry, Entrepreneurial Motivation, Product Innovation, Business Development

1. Introduction

1.1. Background

The role of entrepreneurs can not be ignored, because it is they who bring change and economic progress in Indonesia. Today it can be seen that the more people who go into business, by opening their own businesses, whether small, medium, and large in various sectors. Craft industry sector is very interesting to see today. Handicraft industry in Indonesia has been able to compete at international level and become one of the best in the world [2].

West Lombok pottery industry is experiencing growth. It can be seen from the progress experienced by the entrepreneurs there. Results of earthenware have been exported to many countries, and in 2013 earthenware export value reached US $1,791 million by volume as much as 122 tons [4].

Based on the interview as a preliminary study with some pottery entrepreneur, stated that the motivation, innovation is the key to...
success in business growth occurs. The model proposed in this study refers to the incorporation of research conducted by [20] and [9], where there is the influence of entrepreneurial motivation towards business growth through innovation.

At the reality of the business where entrepreneurial motivation, innovation particularly product innovation have an influence on the growth experienced entrepreneurs. Therefore, this study aimed to assess whether the business reality also applies to the pottery industry in the province, namely: 1) How is the entrepreneurial motivation of pottery business in West Nusa Tenggara?; 2) How is the product innovation of pottery business in West Nusa Tenggara?; 3) How does the business growth of of pottery business in West Nusa Tenggara?; 4) Does entrepreneurial motivation have a direct influence on the growth of pottery business in West Nusa Tenggara?; and 5) Does entrepreneurial motivation have an indirect influence on business growth through product innovation of pottery business in West Nusa Tenggara?

This research aims to create an entrepreneurial motivation measurement model and product innovation that influencing on the development of pottery business in West Nusa Tenggara and to result forms of product innovation development to improve the competitiveness. Also this research is as the deepening of knowledge about entrepreneurship and innovation and organizational competitiveness, particularly in relation to the pottery industry, providing contributions to society, in particular the Government of West Nusa Tenggara province, to take measures in order to develop and the development of creative industries, resulting pattern of business development in the pottery industry in West Nusa Tenggara, generating forms of innovation development of products in order to improve competitiveness, and establishing patterns and methods of implementation of policies in fostering business development of appropriate and well targeted.

1.2. Pottery Craft Industry for Supporting Cultural Tourism

Department of Industry and Trade of West Nusa Tenggara province stated that during 2013 to 2016 Lombok potteries has been able to penetrate the market in 14 countries spread across Asia, Europe and Africa. Most of the pottery products exported through Port of Tanjuk Perak Surabaya, East Java, and through Port Tanjung Priok, Jakarta. Countries in the region are becoming Lombok pottery products market was Singapore with export value reaching 1,626 dollars, 1,749 dollars in Myanmar, Malaysia and Australia 7,110 US dollars and 36,530 US dollars. While in Europe, Italy worth 13,927 dollars, 942 dollars in Germany, Switzerland 859 dollars, 161 dollars in Belgium, France 8297 dollars, 1469 dollars in Netherlands and Spain worth 279 US dollars. United States imported pottery worth 33,755 dollars, 1,743 dollars in Mexico and South Africa worth 320 dollars. The total value of exports of pottery from West Nusa Tenggara reached 108,773 US dollars.

Overseas market opportunities for a range of craft products are still wide open, but these opportunities could not be worked optimally by entrepreneurs craft in West Nusa Tenggara. It did not escape from the various constraints such as quality and design that does not meet the tastes of the market, the lack of knowledge of the entrepreneurs craft on foreign trade and the limited ability of human resources, in particular mastery of technology, management, business insight related to education craftsmen. Seeing the condition that the government tried to facilitate through a colloquium with the employers and manufacturers in order to improve product quality pottery. The government is also working to increase knowledge among employers regarding foreign trade information as well as to motivate all parties to help businesses improve the quality of products and be able to follow the international scale exhibition[3].

1.3. Entrepreneurial Motivation

Motivation is the driving / driver within the direct actions of a person against a particular purpose, and thus focusing one's attention and supports the action taken (Leon, et al, 2008). Motivation is the driving force that causes excitement in one's work to be effective and integrated to achieve satisfaction. Motivation is the motive of someone who is inside, which generate, activate, and directs behavior toward the achievement of the objectives.

According Hisrich, et al (2005) stated that entrepreneurship is a dynamic process for the creation of additional wealth, created by individuals who dare to take risks with the conditions, including time, commitment and provision of various goods and services. While Kao (1993), entrepreneurship is an attempt to create value through the introduction of a business opportunity, taking appropriate risks, and through management skills to drive / empower existing resources [25].

Based on the above understanding, it can be concluded that entrepreneurship is a driving force motivation / urge within that raises the spirit towards the creation of an activity / job to see the opportunities that exist around, acting bold in taking risks, doing activities that are innovative and have a profit orientation.

Variable entrepreneurial motivation in this research refers to [20] research, where:

a. Need for achievement (nAch)

McClelland (1961) states that individuals with n-Ach high
have greater possibilities to carry out activities or duties with the degree of responsibility, ability (skill), effort (effort), and the risk is high enough in order to achieve the expected results, including clear feedback on performance[20].

b. Locus of Control

Is a form of self-control, ie the extent to which a person believes that they control fate, or the belief one can control himself on events, occurrences facing or affecting him. Someone who has an internal locus of control, then the individual is to have confidence in themselves that they can control what happens to them, can be set, directing his life and is responsible for the achievement of any kind will be accepted, whereas someone who is more dominant with an external locus of control, then in the belief that he will have control of all aspects in life and whatever it receives is derived from outside forces, coming from such a fate of luck / fortune, and opportunities[15].

c. Vision

Mechanisms to realize the opportunities usually come to mind entrepreneurship, where entrepreneurs make ideas / ideals to be able to penetrate these opportunities. Ideas / ideals is fundamentally known as vision. Vision generate motivation through expectations of future outcomes desired [15].

d. Desire Independence

Is the desire for individual freedom. Many investigators who have made observations on the role of entrepreneurs in need of freedom. In terms of owner, many of those who enjoy being the boss in the business because they want the freedom to do things according to their way.

e. Egoistic passion

Can be interpreted as enthusiasm, selfishness at work. Selfish here means is excited / passionate high in the work, like the process of building the organization and generate a profit. They are motivated to do what is truly in the interests of their own, which is to do everything necessary.

f. Drive

Means the desire to strive, both in thinking and bringing ideas into reality. When entrepreneurs pursue opportunities that they will take action to make it happen to be real.

g. Goal Setting

Goal setting theory (goal-setting) states that a growing number of challenges in achieving the goals that lead to better performance will result in more motivation, in predicting the appropriate behavior and increase the likelihood of achieving the objectives [15].

h. Self-efficacy

Self-efficacy a belief in a person of his ability to organize and carry out the actions necessary to produce an achievement. Self-efficacy which is high in a person, make that person like things that are challenging and balanced with high durability so as to achieve the desired goal. Therefore, individuals with high levels of self-efficacy will do their best to achieve the things they want [5].

1.4. Product Innovation

Classic definition of product innovation is a broad concept, includes ideas and implementation of an idea to a new product. According to Amabile, et.al (1973), product innovation as the successful implementation of a creative idea about new products in a company[14].

According to[26]innovation of products is divided into two kinds when seen from speed changes, i.e.: 1) Radical innovation, an innovation that is done on a large scale to change a product, which is usually carried out by experts in their field and are managed by the department of research and development; 2) Incremental Innovation, an innovation in a way to repair a small scale to change a product.

Product innovation can be made on product attributes, which include (Kotler and Armstrong, 2004): 1) The quality of the product, which is the ability of a product to perform its functions, which include durability, reliability, accuracy is generated. Durability is reflecting the economic life of the product, while reliability is the consistency of the resulting performance of a product from one purchase to the next purchase. Product quality means conformance quality, that is, free of defects and consistency in delivering high quality; 2) Features of products, which is a means to differentiate products competitive with one another, or between the products of competitors' products. Product features synonymous with nature and something unique, special and privileged not shared by other products; 3) The style and design of the product, which is another way to add value for customers. Style simply describes the appearance of a particular product, while the design has more concept than style. Designs contribute not only in appearance, but also on product usability. Style and good design can attract attention, improve product performance, cut production costs, and provide a competitive advantage.

Business growth is the second stage in the development of business, after start up. At this stage, the company experienced an increase in sales, earnings, liquidity, and begins to diversify its product line. Although sometimes accounting for a turnover yet, but at least the losses became fewer, or in other words the loss suffered declines. This happens because the company already has a market share and has generated positive operating cash flow. With the growth
of this revenue, automatically affects the income earned. This is consistent with that expressed by Davidsson, et.al (2002), that business growth can be seen from the growth in the amount of production, sales, revenues, and profit [12].

### 1.5. Research Hypothesis

Based on the background, problem formulation, and above theoretical framework, the research hypothesis proposed in this study is as follows:

1. It was alleged that there is a direct influence of entrepreneurial motivation to craft business growth in West Nusa Tenggara
2. It was alleged that there is no direct influence between entrepreneurial motivation towards business growth through product innovation in pottery in West Nusa Tenggara

### 2. Method

This research was conducted at the centers of pottery West Nusa Tenggara. The population in this study is all entrepreneurs of Banymulek pottery in the village, subdistrict of Kediri, West Lombok district and village Penakak, Masbagik sub-district, East Lombok, with a number of business units are approximately 117 business units.

Determination of the number of respondents in this study was determined by using the Yamane approach (in[17]), as follows:

\[ n = \frac{N}{Nd^2 + 1} \]

Notes:
- \( n \): total samples
- \( N \): total population
- \( d \): deviation standard

Based on this formula, then the sample size in this study was by 91 entrepreneurs, with an error rate of 5%. The sampling technique in this research is the probability sampling, the random sampling technique, where the chances of each member to be elected as the same sample. Using simple random sampling, which is taking a sample of the population members are done randomly, without regard to strata, because the population is considered to be homogenous [24].

### 2.1. Operational Variables

Entrepreneurial motivation is a driving force that raises the spirit in a person to create an activity/job. Acting as an independent variable \( (X) \), with indicators, consisting of: the need for achievement, locus of control, vision, independence, passion, drive, goal setting, and self efficacy.

Product innovation, the implementation of creative ideas for a new product, which can be done by developing a product that is different from the previous. Acting as an intervening variable \( (Y_1) \), with the indicators: 1) The quality of the product, which is seen from the increased durability / economic age, accuracy to be free from defects; 2) Product features, as seen from the addition of a characteristic / feature products; 3) The style and design of products, as seen from the development of shape, color and function of the product.

Business development, which is the second stage in the development of the business, acting as the dependent variable \( (Y_2) \), with indicators of increased profits.

### 2.2. Method of Collecting Data

Data collection techniques used in this research is by using a questionnaire (questionnaire), which contains questions/statements regarding the variables studied (variable entrepreneurial motivation, product innovation and business growth), and interview as data collection techniques undertaken by researchers to find issues that occur and so that researchers can learn things more deeply.

### 2.3. Data Analysis Methods

Analysis of the data used is descriptive statistical analysis and inference using path analysis (path analysis) through a simple regression analysis. Descriptive statistical analysis used in this study to describe each variable is by using the following formulas:

#### 2.3.1. Mean

Mean is a value that represents the average score of the whole sample. The formula is as follows [27]:

\[ X = \frac{\Sigma xi}{n} \]

- \( X \): average value
- \( \Sigma xi \): total of entire data
- \( n \): number of data

#### 2.3.2. Deviation Standard

Standard deviation is a measurement standard deviations were consistent for all of the normal distribution. Standard deviation formula is [27]:

\[ s = \sqrt{\frac{\Sigma (xi - x)^2}{n - 1}} \]

- \( Xi \): average value
- \( X \): average value
- \( n \): number of data
2.3.3. Business Growth

Earnings growth can be calculated using the following formula:

\[ \text{Profit growth} = \frac{X_2 - X_1}{X_1} \times 100\% \]

\( X_2 \): value of current year’s profit
\( X_1 \): value of previous year’s profit

Inference analysis in this research is the analysis of the path by using three simple linear regression analyses were processed with SPSS software program. Framework concept and path analysis are as follows:

![Figure 1. Conceptual Framework.](image)

Path analysis model is used in all three regression models:

Model 1: \( ZY_2 = P_1X \)
Model 2: \( ZY_1 = P_1X_1 \)
Model 3: \( ZY_2 = P_1Y_1 \)

Note:
\( ZY_1 \): product innovation
\( ZY_2 \): business growth
\( P_1 \): coefficient of each lane
\( X \): entrepreneurial motivation

2.4. Validity and Reliability Test

Validity test is used to determine the validity of a questionnaire. To test the validity of the questionnaire done by correlating each of the questions with a total score this is the sum of each score point, the Pearson Product Moment formula [22], namely:

\[ r_{XY} = \frac{n (\sum XY) - (\sum X)(\sum Y)}{\sqrt{(n \sum X^2 - (\sum X)^2)(n \sum Y^2 - (\sum Y)^2)}} \]

\( r_{XY} \): correlation coefficient
\( \sum X \): total of item score
\( \sum Y \): total of all items scores
\( n \): total responders

By using SPSS calculating the correlation coefficient by comparing, count-\( r \) with table-\( r \). If count-\( r > \) table-\( r \) then the question is valid, but if count-\( r < \) table-\( r \) then the question is declared invalid, the question can be removed or replaced. Reliability test is used to measure the consistency of the study variables. The questionnaire is said to be reliable if the instruments provide measurement results that are unchangeable and having similar result when used repeatedly. Reliability tests is done by using Cronbach Alpha method with the following formula [17]:

\[ R_n = \frac{K}{K-1} \left[ 1 - \frac{\sum Si}{St} \right] \]

\( R_n \): relative instrument
\( \sum Si \): total of variant score of each item
\( St \): total variant
\( K \): number of questions or number of items

SPSS is used for testing the reliability of Cronbach Alpha. If the value of Cronbach’s Alpha > 0.6 then it is declared reliable testing [11].

2.5. Classical Assumption Test

2.5.1. Normality Test

Normality test is useful to examine the data and the independent variable on the dependent variable data generated regression equation, normal or not normal distribution. The regression equation is said to be good if it has a free variable data and variable data tied normal or near-normal distribution. This normality test can be done by histogram and normal probability plots. For a histogram graph that note is the curve, if the curves tend to be symmetrical about the mean, it can be said normal distribution of data or vice versa. As for how normal probability plot is said to be normally distributed if the real data lines follow existing diagonal lines [25].

2.5.2. Autocorrelation Test

According to [16], autocorrelation test is a test of the assumptions in the regression where the dependent variable is not correlated. The point is that the value of the dependent variable is not related to the value of the variable itself, either the value or the value of the previous period period thereafter. To detect symptoms Durbin Watson autocorrelation test was used (using SPSS), whereby if the value of the Durbin Watson is between 2 and -2 then there is no autocorrelation.

2.5.3. Heteroscedasticity Test

Heteroscedasticity assumption is the assumption in the regression in which the variance of the residual is not equal
to the observation of the observation to another. In regression, one of the assumptions that must be met is that the residual variance of the observations to other observations has no particular pattern. To detect the presence or absence of heteroscedasticity can be seen in the graph scatterplot between the predicted value of the dependent variable and the residual [10]. If the scatterplot dots form a regular pattern narrowed, widened, and wavy it can be said for happening heteroscedasticity.

3. Result

3.1. Validity Test Result

The test result showed that all questions on X1 are valid, because the Pearson Product Moment value(r-count) > r-table. So the conclusion that all questions used in entrepreneurship motivation variable is valid. And also the test result showed that all questions on Y1 are valid, because the Pearson Product Moment value(r-count) > r-table. So the conclusion that all questions used in the product innovation variable are valid.

3.2. Reliability Test Result

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>No of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.892</td>
<td>13</td>
</tr>
</tbody>
</table>

Based on the above table, it can be seen that AlphaCronbach value of Reliability test results of entrepreneurship motivation variable show the required value, that is greater than 0.6. So the question on the entrepreneurship motivation variable is reliable.

Based on the above table, it can be seen that AlphaCronbach value of Reliability test results of product innovation variable shows the required value, that is greater than 0.6. So the question on the innovative product innovation variable is reliable.

3.3. Classical Assumption Test

To test the research hypothesis will be done regression analysis gradually. Regression is done consists of 3 models namely: (1) Regression of entrepreneurship motivation towards business growth, (2) Regression of entrepreneurship motivation toward product innovation, and (3) Product innovation on business growth.

3.3.1. Normality Test

In the regression analysis normality testing performed on the residual value generated regression model. Testing of residual normality is done by using normal probability plot. If the points are collected around a straight line, then the residual model of the regression is normally distributed. Normality test against all three models can be shown in Figure 2.

From the picture above is known that on normal probability plot of regression model 1, 2 and 3. The points collected around a straight line, so it is concluded that the residual regression model 1, 2, 3 on the respondents following the normal distribution.
3.3.2. Autocorrelation Test

Autocorrelation indicates the correlation of the dependent variable with itself. Detection of whether or not autocorrelation is done by looking Durbin Watson (DW) value of the regression equation is between -2 to 2. Autocorrelation test results by looking DW value on the three models of regression seen that the Durbin Watson on the three regression models is between -2 to 2, so the model is otherwise not autocorrelated.

3.3.3. Heteroscedasticity Test

Heteroscedasticity shows the inequality of variance of the residual over an observation to another observation. Detection of whether or not heteroscedasticity is done using scatterplot between the value of ZPRED (X) and SRESID (Y). If scatterplot produce dots that do not form certain patterns and dots spread out above and below zeros on the Y axis, it is concluded that there is no heteroscedasticity in the regression model. Test results of heteroscedasticity by using scatterplot on the three regression models as seen on Figure 3.

Based on the results of simple linear regression analysis in the path analysis performed using SPSS acquired three regression model as follows:

Regression Model 1: \( ZY_2 = 0.485 X_1 \)

Regression Model 2: \( ZY_1 = 0.751 X_1 \)

Regression Model 3: \( ZY_2 = 0.516 Y_1 \)

The regression equation above has fulfilled classical assumption test. In the third regression model no symptoms of autocorrelation, heteroscedasticity, and meet the test of normality. All three models are also said to have a significant effect, because the three models the t value greater than ttable. t to 5.227 for the first model, the second model of 10.732, and the third model of 5.681, which is the third t value is greater than t table that is equal to 1.987. It is also seen in the significant value of the three models is equal to 0.000, where the value was <0.05.

4. Discussion

From the results of the regression seen that these variables have a significant effect among variables. Entrepreneurial motivation has a significant influence on business growth pottery by 48.5%, which is supported by previous studies, such as research by [1], which stated that the motivation of entrepreneurial led to the growth of the business. Entrepreneurial motivation affect innovation pottery products of 75.1%, according to the study proposed by [6] which states that there is significant influence between motivation and innovation. And product innovation pottery which also has a significant influence on the growth of small businesses, which is in line with the results of [9], that the innovation effect on financial performance.

Based on the results of the hypothesis stated that the first hypothesis is accepted, however the second hypothesis is rejected, because of the direct effect (0.485) is greater than the indirect effect (0.388). This shows that the right model in this study is a model of direct influence, which can be said also that the motivation and innovation in influencing the growth of business can be a stand-alone variable. This is consistent with previous studies that have described above. And when seen from the results of its indirect effect, low value arises because of the influence of innovation on the growth of small businesses. It can happen because although employers feel that they have to innovate, but with events
such as the global economic crisis that occurred in recent years, which dampen consumer purchasing power abroad that ultimately resulted in a growth process vessels become too high.

The overall model in this study resulted in the coefficient of determination of 74.7%. The coefficient of determination indicates that the information contained in the data amounted to 74.7% can be explained by the overall model, while the remaining 25.3% is explained by other variables (that are not included in the model) and error.

The description indicates that the growth of business in creating pottery Banyumulek, West Lombok associated with entrepreneurial motivation. Entrepreneurial motivation one can directly affect the growth of the business, while the indirect effect through innovation does not exist.

5. Conclusion

Based on the results achieved it can be concluded as follows:

1. In general, entrepreneurial motivation, product innovation, and business growth that occurred in the pottery entrepreneur Banyumulek already good. This is evident from the answers of respondents on the table that the average frequency gives high ratings in categories related to entrepreneurial motivation owned. In other words, these entrepreneurs have a high motivation to engage in entrepreneurship so that ultimately the aim of increasing business growth can be achieved. This motivation alone arise due to the encouragement of inner entrepreneur's own (internal) and influences arising from the business environment (external), such as business opportunities and threats from competitors.

2. On average respondents often in product innovation, both in terms of shape, color, or other functions if the consumer wants. Generally consumers have the desire or the specific criteria pottery products that had not previously been made by the employer itself, so it must innovate pottery products are produced. For example once the entrepreneurs only produce pottery products such as tableware or kitchen, it's been so many variations, such as flower vases, umbrella, chandeliers, wall hangings, ashtray, and so forth, even some products that are multifunctional.

3. Average growth of business during the years 2015-2016 around 27%. Although the value is below 50%, but the value can be said to be satisfactory if they see the current economic conditions. In other words, businesses pottery Banyumulek always experienced growth every year despite volatile.

4. After performing the path analysis and tests of significance, especially t test, it appears that the motivation variables have a significant positive direct effect on the growth of business in the center of pottery Banyumulek. This can be seen from the value of the path coefficient between motivation and business growth in the amount of 0.485 with a significance value of 0.000 (less than 0.05). T-counted value was greater than the value of the t-table (5.227> 1.987). Thus, the first hypothesis in this study received.

5. Based on the results of path analysis also found that the motivation variable does not have a direct influence on the growth of the business through innovation at the center of pottery Banyumulek. This can be seen from the value of the path coefficient indirect effect which has a smaller value than the direct effect (0.388 <0.485). Although the results of the regression variables has a positive and significant influence, but due to a combination of both the value of the coefficient is smaller then the indirect effect is considered to be non-existent. Thus, the second hypothesis is rejected. The overall model in this study has a coefficient of determination of 74.7%.

References


