

Adoption of Bamboo Crafts SME Innovation

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Abstract: This study aims to determine the positive influence of the characteristics of innovation, namely relative excellence, suitability, complexity, trial and visibility towards the adoption of innovation. This study uses a quantitative approach. Data collection is done by distributing questionnaires. The unit of research analysis is the Bamboo Artisans in Sendari, Tirtoadi, Mlati, Sleman, Yogyakarta. The respondents that were sampled were 48 respondents. The analytical method used in testing hypotheses is multiple regression. The results of this study have a positive influence between the characteristics of innovation, namely relative superiority, suitability, complexity, temptation and visibility of the adoption of innovation.

1 INTRODUCTION

Today globalization and increasing competition cause companies to compete with each other to get the attention of consumers, so companies are required to be proactive in responding to changes in a dynamic environment. Free trade will lead to increasingly competitive competition, so consumers are more selective in choosing products. Companies are required to be more innovative in producing a product (Ferdinand, 2000).

To win the competition, the company must innovate. Innovation will increase the added value of a product, and innovation will create a new product that can provide better solutions for solving problems faced by consumers. So the ability to innovate is needed by the company. Innovation must be able to make different products in the eyes of consumers, so consumers are more interested in buying these products than competing products. One key to innovation is the human resources that drive the company. So the ability to innovate is needed by the company (Sumarwan, 2010).

An innovative product will have a surplus value compared to rival products or substitute products, and the innovative product will create its market segment and spin-off old and inefficient products (Tan, 1994). Various handicraft products are produced by many production centers scattered in various regions in Yogyakarta, including bamboo handicraft products.

In Yogyakarta itself, there are various kinds of SMEs. One of them is bamboo handicraft UKM in Sendari, Tirtoadi, Mlati, Sleman, Yogyakarta. The Bamboo Craft Industry in Sendari Hamlet has existed since 1960. There are around 48 bamboo artisans. Artisans obtain the raw materials in the form of bamboo from various regions, namely Sleman, Kulon Progo, Magelang, Klaten, and Pacitan. The price offered also varies depending on the size, type of bamboo, model, and level of complexity.

Bamboo artisans in Sendari use various types of bamboo plants in their production processes, among others, Petung Bamboo, Apus Bamboo, Legi Bamboo, Wulung Bamboo, Tutul Bamboo, and Cendani Bamboo.

Crafts produced at Sendari include: lively, bed, chair, table, gazebo, room divider, and so on. The bamboo craft of Sendari Village has penetrated export markets, such as the Netherlands, the Philippines, Saudi Arabia, India, Malaysia, Britain, Norway, France, and America. To penetrate the export market to all of these countries, the artisans develop the innovation and creativity of their products.

Just like artisans in other fields, bamboo handicraft businesses also experience ups and downs. The lack of tools and innovation in the production process is an obstacle for bamboo handicraft producers. The demand for bamboo handicrafts is currently increasing. Thus the artisans can meet the needs of consumers with adequate equipment and product innovation by the artisans. For bamboo

furniture artisans in Sendari, supporting tools for the production process are needed. There are various kinds of innovations carried out by bamboo artisans, from the design, equipment, and preservation.

Some of the innovations made by artisans at Sendari are innovations in equipment and preservation systems. The innovation is significant to be done to increase sales of handicraft products and meet market needs. The artisans realized the importance of innovation in the production process, so they started to adopt innovations in equipment, namely the adoption of nail firing innovations, which are the leading equipment for making bamboo crafts.

Another innovation that began to be adopted by bamboo artisans in Sendari is Vertical shock diffusion (VSD) or better known as the preservation process. The preservation process (VSD) has been carried out by artisans since 2000 and is still being developed.

Innovations in nail firing equipment and preservation systems (VSD) provide benefits and benefits for artisans because it requires a short time in the manufacture of handicraft products. Innovation is needed by artisans to keep winning the competition. Thus the artisans are required to be able to make a variety of new products, develop various kinds of innovations, and be able to adopt innovations. Based on the background and description above, the authors take the title of the study on "The Effect of Innovation Characteristics on the Adoption of Innovation on Bamboo Artisans in Sendari Village, Tirtoadi, Mlati, Sleman, Yogyakarta."

2 LITERATURE REVIEW

2.1 Behavior Adoption of Innovations

Understanding consumer behavior is an action that is directly involved in obtaining, consuming, and depleting products and services, including processes that precede and follow up from this action. The main problems found in marketing and consumer behavior, namely consumer response to new services or products. The basis for observing consumer responses to new products is part of a study called innovation diffusion.

Consumer researchers examine the diffusion of innovation, which is divided into the diffusion process and the adoption process. The diffusion process is a macro process in which the process focuses on the development and innovation of new products or services carried out by a company aimed at the market, how companies can see market needs

and then determine an innovation for these markets (Schifman and Kanuk, 2010).

The decision taken by marketers is the process of how the market can accept a new product after this referred to as the adoption process.

2.2 Diffusion of Innovations

In this process, more emphasis is placed on individual consumers in responding to a new product, whether to accept or reject the product. The process of diffusion is concerned with how innovation can be accepted, how it can be integrated into the existing market share. More precisely, diffusion is an acceptance of innovation, can be in the form of goods or services, which are conveyed through communication, either through the mass media, salespeople, daily talks, to members of the social system, namely society in general in a certain period (Rogers, 1995).

Diffusion is essential because not everyone can accept an innovation, or in the end, can accept it, but it takes a long time. That is more because there is a change from a product or service that was previously commonly used, and people need time to be able to accept new ideas of innovation from the company and can generally use the new offer. The tendency that occurs in society is reluctant to try something new and get out of their habit.

2.3 Hypothesis

Based on the theoretical basis and framework of thought, theoretical and empirical studies, the following hypotheses can be made:

- a. Relative superiority influences the adoption of Innovations in Bamboo Artisans in Sendari Village, Mlati, Tirtoadi, Sleman, Yogyakarta.
- b. Suitability influences the adoption of Innovations in Bamboo Artisans in Sendari Village, Tirtoadi, Mlati, Sleman, Yogyakarta.
- c. Complexity influences the adoption of Innovations in Bamboo Artisans in Sendari Village, Tirtoadi, Mlati, Sleman, Yogyakarta.
- d. Experiments affect the adoption of Innovations in Bamboo Artisans in Sendari Village, Tirtoadi, Mlati, Sleman, Yogyakarta.
- e. Visibility influences the adoption of Innovations in Bamboo Artisans in Sendari Village, Tirtoadi, Mlati, Sleman, Yogyakarta.

3 RESEARCH METHOD

3.1 Types and Research Objects

The type of research used in this study is quantitative research using surveys. The object of this study was the Bamboo artisans in Sendari Village, Tirtoadi, Mlati, Sleman. The population of this study was all Bamboo Artisans in Sendari Village, Tirtoadi, Mlati, Sleman, Yogyakarta, totaling 48 Artisans with the sampling technique used was a census.

3.2 Data Analysis Technique the Analytical

A tool used is multiple linear regression analysis. Researchers use multiple linear regression analysis because it intends to predict how the rise and fall of the dependent variable if two or more independent variables as a predictor factor is manipulated (raised the value down).

4 RESULTS

4.1 Characteristics of Respondents

Characteristics of respondents were analyzed in this study were gender, length of employment, income, and education; the results of a descriptive analysis can be explained as follows:

Gender		Number%
Male	38	79.2
Female	10	20.8
Education		
SD	4	8.4
SMP	16	33.3
SMA	28	28.3
Income		
1 - 2 million	41	85.4
> 2 million	7	14.6
Length of work		
<15 years	2	4.2
15 - 30 years	32	66.7
> 30 years	14	29.2

4.2 Results of Multiple Linear Regression Analysis and Hypothesis Testing

The Results of multiple linear regression analysis are used to determine the effect of superiority relative, suitability, complexity, trialability, visibility to the adoption of innovation can be seen as follows

5 CONCLUSIONS

Based on the results of data analysis and discussion, the following conclusions are obtained:

1. The results of the study show that the relative superiority has a positive and significant effect on the adoption of innovations in bamboo artisans in Sendari Village, Tirtoadi, Mlati, Sleman. This means that the better the relative advantages, the more adoption of innovation.
2. The results showed that suitability had a positive and significant effect on the adoption of innovations in bamboo artisans in Sendari Village, Tirtoadi, Mlati, Sleman. This means that the better the suitability, the more adoption of innovation.
3. The results showed that complexity had a negative and significant effect on the adoption of innovations in bamboo artisans in Sendari Village, Tirtoadi, Mlati, Sleman. This means that the lower the complexity, the adoption of innovation is increasing.
4. The results showed that the experiment had a positive and significant effect on the adoption of innovations in bamboo artisans in Sendari Village, Tirtoadi, Mlati, Sleman. This means that the better the experiment, the adoption of innovation will increase.
5. The results showed that visibility had a positive and significant effect on the adoption of innovations in bamboo artisans in Sendari Village, Tirtoadi, Mlati, Sleman. This means that the better visibility, the adoption of innovation is increasing.

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