

DEVELOPMENT OF PRODUCT PROCESSING PROCESSES FOR TOURISM, COMMUNITY ENTERPRISES, BAN CHIANG TOURISM PRODUCT PROCESSING GROUP

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ABSTRACT

This research study aims to study the process of processing products for tourism, to increase efficiency in the process of processing tourism products and to reduce costs in the processing of tourism products. The researcher surveyed the production sites of pottery using the principles of social engineering. From the survey, it was found that a large amount of pottery (buffalo-shaped pottery) cracked during firing (36 percent). The solution to the problem was jointly developed between the researchers and the buffalo potters. It was found that mixing charcoal with rice husks in the burning process Resulting in reducing the cracking of pottery to 13 percent.

Keywords: development of product, pottery, social engineering

INTRODUCTION

A study of development of product processing processes for tourism, community enterprises, Ban Chiang tourism product processing group, is a group that has been established for a long time and has expertise. This product is in the form of souvenirs that the group has produced itself, which promotes the development of products in more diverse formats. We also have expertise in the production and processing of various products to promote tourism and the preparation of souvenirs for distribution to tourists traveling to Ban Chiang.

Buffalo sculpture products are another souvenir for tourists who visit Ban Chiang. At present, there are only a handful of buffalo sculptors and there is little transfer of knowledge in sculpting. The researcher therefore used community potential analysis skills and cause and effect analysis to understand the challenging factors according to the social engineer model. Then filter and derive according to the principles of the problem. The process of making a buffalo uses local clay in the operation and must be fired according to the principles of ancient pottery firing by using rice husks to burn pottery in an ancient style kiln from the original culture onwards. As a result, the process for firing pottery has not yet been developed. To make pottery firing more efficient and reduce cracking as much as possible. The researcher

is therefore interested in studying the process of pottery making and firing. What are the shortcomings? How can we use the principles of social engineering as a tool for studying and solving problems?

METHODOLOGY

The researcher visited the area in the development of product processing processes for tourism, community enterprises, Ban Chiang tourism product processing group, which studied general information by observing the problem conditions within the location and problems in the production process and recorded them. Use a camera to record information and record audio in interviews. Visiting the area to study work processes, analyzing, and defining problems, collecting data, summarizing operational results, studying tools used to solve problems, efficiency, implementing corrections and improvements, and preparing reports.

Social engineer tools There are interesting details as follows (Nongrat Isaro, 2019) [1]

(1) The “Fah Prathan” tool is a practice for observing and collecting information about things. and interpret every dimension of information to best reflect the reality of the community.

(2) The “Biological Clock” tool is a practice to familiarize yourself with asking key questions, including what to do (What), where to do it (Where), how to do it (How), why to do it (Why), who to study (Who), and when to collect data. (When) Data is recorded, analyzed, and results summarized for clarity.

(3) The "Developmental Timeline" tool is a process for practicing sequencing events through stories. Using questioning skills to collect information in a systematic chronological and chronological order. To be able to analyze potential and social capital or community capital will help understand the way of things.

(4) The “Process Timeline” tool is a process for practicing deciphering steps or processes by asking curious questions and recording information. Sort systematically to understand the method of obtaining the things studied in a deep and complete manner. Until it can lead to analytical thinking and synthesis of information for process development.

(5) "M.I.C. model" tool for local development" is a process of practicing creative thinking to create innovation. which can take results from the tool “Process Timeline” to develop further to increase efficiency, quality, value or value by combining steps (Process Modification), improving process steps (Process Improvement) or adding new steps in the process (Process Creation) respectively.

The term social engineer is important in that it is “Social Engineer Skills” of learning in the 21st century and are specific skills of Rajabhat University students that have been cultivated, trained, and educated through the process of logical analytical thinking. Find the real problem Think systematically, design Thinking, act systematically with steps according to the principles, not sticking to textbooks, consider real problems. Communicate and coordinate with the goals of the social partnership network to understand, access, depend on, and develop sustainably. Know how to create tools and techniques that are in line with the social landscape and methods of people living in local communities, producing social innovations to solve society's problems in the guidelines that is correct and good until one makes oneself a refuge and gracefully build oneself to be depended on by society (P. Phukhamchanod, 2021) [2]

RESULTS

The study researcher used skills in analyzing community potential. And through cause and effect analysis to see the challenging factors according to the social engineer model, they filtered and derived the principles of the problem as follows: Because the process of making a buffalo uses local soil in the operation and must be carried out in the firing according to The principle of ancient pottery firing is by using a kiln to burn pottery in an ancient style charcoal kiln from the original culture onwards. Therefore, the process for firing pottery has not yet been developed. At present, approximately 30 buffaloes will be burned in one round. There will be an average of 19 buffaloes that do not break, and approximately 11 buffalo will be damaged per round of burning. From Table 1.

Table 1

Table showing the amount and percentage of waste before and after the improvement

	Before	After
Amount of waste	11	4
Percent of waste	36 %	13%



Figure 1: Showing pottery that has just been made and has not yet been fired.

Figure 2: Showing broken pottery products after the firing process.



According to the principle of creating additional steps with knowledge: for higher efficiency. A solution to the problem developed jointly between researchers and the buffalo sculptors. When we mix charcoal with rice husks to fire pottery. This combination will have a positive effect on the calcination process and the resulting product as follows:

1. Heat Dissipation: Adding charcoal mixed with rice husks improves heat distribution in pottery. Charcoal represents the fuel in the burning process. This allows the molding machine to receive constant heat and ensures even baking throughout the entire machine.
2. Cooling: The combination of charcoal and rice husk helps the pottery to cool better, reducing the chance of excess evaporation or heat leaking out of the pottery. This makes the pottery work more efficient and the firing process easier to control.
3. Pottery has consistent results: Mixing charcoal and rice husks allows pottery to produce high quality and consistent results. and reduce the chance of defects or fragmentation of the pottery during the firing process.
4. Safety: The correct mixing of charcoal and rice husk improves the safety of the burning process because the stable temperature of the charcoal and proper cooling makes it the use of pottery that is even more durable

CONCLUSION AND FUTURE WORK

Conclusion

Troubleshooting process:

The loss of raw materials is reduced. Improving the incineration process results in less loss of raw materials, such as reducing the number of wastes from 11 to 4, resulting in more benefits to the resources used in the process, consistent with (C. Wattanachoti Wong 2015) [3] who studied the waste reduction planning in production process of Rachanon bean cake. It was found that the study focused on the reduction of waste in the process of forming. Because of the evaluation of the quantity of waste and loss it was found that the process of forming had the highest quantity of waste from all 3 steps. The process of forming had the quantity of waste 84.12 kg per day and loss 7,570.95 baht per day and (S.

Kwanmuang 2020) [4] studied application of the lean concept for reducing the cost of rubber wood production processes found that the results of operations after Install a support device on the saw table to prevent the wood from falling or falling off the surface of the board. This will reduce the average waste from the process before the renovation and reduce the cost of production operations because there is more waste. Reduced by a large amount and the accidents that occur after the wood falls off the table can help reduce the cost of the operator in the production process. As a result, the cost of raw materials in the production process can be reduced by a large amount.

Benefits:

Reduce production costs: Reducing the number of incineration cycles and the amount of waste results in lower production costs. and leads to savings in production, consistent with (S. Yuppayaow 2022) [5] that study on cost reduction approaches to produce clear plastic bottled lemon juice, a case study of lime house company, faced with a problem with reducing the cost of its production process. Due to high production costs, the company does not receive profits as expected. Monthly results are not satisfactory.

Increase net worth Reducing the amount of waste and increasing efficiency in the process increases the net value obtained from sales. and results in an increase in community income, consistent with (W. Somkeatkun 2019) [6] The creating added value for Chaiya Native Rice in Chaiya district, Surat Thani province. The results of the research showed that the value-added model for Chaiya Native Rice were product development to be marketable, developing the packaging design to be in accordance with consumer groups and processing into various products. The guidelines for promoting value-added creation include packaging design development, product diversification, increasing distribution channels and public relations.

Future Work

1. Study the process of reducing buffalo pottery to zero using scientific principles to develop the process.
2. Study marketing and increase distribution channels for buffalo pottery products.
3. Development of methods to increase product value Buffalo pottery such as appearance, color, size, etc.

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