CHAPTER 1

Introduction

Background and Significance of the Problem

One Tambon One Product (OTOP) is one of government projects that aim to use resources and local wisdom in each community to develop main local products and to create community income. In order to develop products and improve marketing management, the government came up with a policy to increase management efficiency of the One Tambon One Product project, and to connect local products with both domestic and international markets. Hence, Thai OTOP Product Champion (OPC) project was established by the government to provide database and product development ratings (1-5 stars) to entrepreneurs by classifying them into 5 product categories; food, beverage, textiles and clothing, wares/decorations/souvenirs, and non-food herbs (Department of Community Development, 2012). The framework was then prescribed to set up the standard of suitable and proper commercial packaging as well as creating marketing opportunity. Therefore, if communities wish to expand their products to domestic and international markets, entrepreneurs should upgrade their products by prescribing the standard and developing their products.
According to the most recent data in 2012, there were 71,739 products registered in OTOP list. However, only 14.1% are qualified for entering OTOP Product Champion project, while 85.9% were not ready to join the OTOP Product Champion project (Phaloparakarn, 2013). The information shows that many products were not ready elevate their quality and to be evaluated by OTOP Product Champion project. If the OTOP entrepreneurs desire to join OTOP Product Champion project to set up the OTOP standard, they would have to wait since the project is conducted every 2 years (Department of Community Development, 2012). The researcher also found that among the products registered for OTOP project, handicraft such as wares/decorations/souvenirs had the highest quantity of 35.9% (Department of Community Development, 2013). After passing the registration process of OTOP Product Champion project (OPC), only 13.13% have passed while 86.87% were not ready to be registered as OTOP Product Champion project (Phaloparakarn, 2013). It can be considered that many products are not ready for evaluation in OTOP Product Champion project. The percentage of products entering OPC should be increased in order to elevate handicraft products like wares, decorations and souvenirs. Handicraft products can be divided into 4 categories according to their materials; woods, metal, ceramic and pottery, and textile. From the 4 categories, wood handicraft products have the highest quantity to be registered in the project at 41.75% (Phaloparakarn, 2013). This research, therefore, selected wood handicrafts as case study in order to develop a recommendation system for wood handicraft entrepreneurs who want to develop their product for OPC evaluation.
In order to prepare wood handicraft products to be ready for evaluation, it has been reported that the community strength in marketing and product background has the total score of 100 points (Department of Community Development, 2014). OTOP entrepreneurs want to register their products into the OPC project should consult with experts for preparing their readiness. However, only a handful of specialists are available, and each consult takes amount of time. In some cases, since OTOP entrepreneurs desire to have many consulting periods or live a long distance from specialists, the expense for both consulting and traveling could be high.

Since computer technology and the Internet become great parts of Thai people’s daily life, they are more accessible from home and community. The development of a recommendation system by using computer technology can be used to assist OTOP entrepreneurs to evaluate their products by reducing reliance on human experts. The system can help entrepreneurs to evaluate their products and scores of each field. It also gives advice and guidelines to improve product in the fields that fail. The system will be able to prepare readiness of entrepreneur who want to register their product to the OPC project, and eventually to export their products to both of domestic and international markets. In this study, the researcher collected information about criteria and indicators from experts, printed media and relevant studies. This research is useful for current OTOP entrepreneurs and those who are interested in producing OTOP products in the future. Product potential could be evaluated anytime with no limitation of place and time. It also helps reducing cost on human experts in the Department of Community Development.
Research Objectives

1. To study criteria and indicators used for evaluating OTOP wood handicraft products.

2. To develop a recommendation system for entrepreneurs who want to develop their products according to the selection criteria before submitting their products to the OTOP Product Champion project.

Significant of the study

1. The recommendation system provides criteria and indicators used by OTOP selection committee in evaluating OTOP wood handicraft. The criteria and indicators developed in this study can be academically useful for researchers and scholars.

2. The recommendation system is ready for present and future entrepreneurs of wood handicraft products who want to evaluate their products according to criteria and indicators of OTOP Product Champion project.

3. Organizations, such as the Department of Community Development are able to use the recommendation system developed in this study for assisting them in preparing entrepreneurs for OTOP Product Champion project.

Research Scope

The research scopes of this study can be described as follows;

1. Area

This research is a case study of OTOP wood handicraft entrepreneurs who are qualified for OTOP Product Champion project with rating 1-5 stars in the Northern
region of Thailand. The entrepreneurs were classified into 2 group based on their area from upper Northern to lower Northern region of Thailand

2. Population

There are 2 groups of population for the research;

2.1 10 members of OTOP selection committee who are responsible for evaluating products, such as wares, decorations and souvenirs. Information collected from this research group is used for developing criteria and indicators used in the recommendation system.

2.2 169 entrepreneurs of qualified products in the OTOP Champion project in the categories of wares, decorations and souvenirs with rating of 1-5 stars. The entrepreneurs were divide into 2 group; 169 entrepreneurs from the upper Northern region, and 49 entrepreneurs from the lower Northern region. To calculate the sample size, Taro Yamane (1967)'s formula was used and the found that the researcher had to select 119 entrepreneurs from the upper Northern region, and 44 from the lower Northern region. Both groups were used as case studies for the recommendation system.

3. Content

3.1 This research studied criteria and indicators of Thai wood handicraft product in the OTOP Product Champion project in the categories of wares, decorations and souvenirs. The researcher collected information about criteria and indicators used for evaluating OTOP products, and then turned them into quantitative indicators by using the AHP technique. The criteria and indicators can be used to evaluate products by interpreting the score of evaluation calculated from the answers.
3.2 The researcher also developed the recommendation system for Thai wood handicraft entrepreneurs who want to evaluate their products according to criteria and indicator of the OTOP Product Champion project. The recommendation system was developed by using the PHP programming language and MySQL database platform. The system was developed according to the principle of research and development from studying relevant theories and research, analyzing details of criteria and indicators, designing the system, and developing the system. In this system, the user is required to fill information about their products into the system. Then, the system will evaluate the products and display the score and rating standard (1-5 stars) in each field. The system also gives recommendation and guidelines for every field that the product fails to pass in order for the entrepreneurs to develop their products.

**Basic assumptions**

This study aims to study the criteria and indicators according to the OTOP Product Champion project. The criteria and indicators will be used to evaluate products and to provide guidelines for OTOP entrepreneurs to develop their products submitting their product to the OTOP project. Analytic Hierarchy Process (AHP) is used to quantify qualitative criteria and indicators that can be further used in the recommendation system. In case of adding or modifying criteria and indicators in the recommendation system, recalculation of score by using the AHP is required.
Definition of Terms

OTOP, stands for One Tambon One Product, refers to the most excellent product of each sub-district which is well-selected and registered by National OTOP Administrative Board according to specified regulations (Office of the Council of Stage, 2001).

Handicraft product refers to OTOP wares/ decorations/ souvenir made of wood and produced mainly by labor. Its purposes of usage are to use in household, as household decoration, or as presents. A handicraft product here excludes clothing accessories and those produced by mainly machinery.

OTOP Product Champion (OPC) refers to a project for selecting and rating products, such as wood handicraft products in the category of wares/ decorations/ and souvenirs into 1-5 stars.

OTOP entrepreneur and producer refers to wood handicraft entrepreneur and producer in wares/ decorations/ souvenirs category who have registered their products to OTOP project. The entrepreneurs were from the upper and lower Northern region of Thailand.

Recommendation system refers to a system that can provide recommendations, information and procedures for OTOP entrepreneurs to develop their wood handicraft products before submitting them to the evaluation process made by the selection committee of the OTOP Product Champion project.

Background and significance of problem, research objectives, research scope, basic assumption and definition of terms above leads to literature review in the Chapter 2.