Knowledge Management of Community Enterprise in Northeast Thailand

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***Abstract*—**This research examines the status and problems associated with knowledge management within community enterprises in Northeast Thailand. Sampling included a total of 400 community enterprise members. The research instrument utilized was a questionnaire, using descriptive analysis methods such as average mean, percentage, standard deviation and ANOVA. The study results define a community enterprise as: knowledge identification from job description; acquiring knowledge within a group by asking experts; acquiring knowledge externally by study tour; knowledge creation from practice; collection of knowledge in person; distribution of knowledge with instruction, advice, demonstrations; utilization of knowledge to develop new products. The problems associated with knowledge management are recognized in all aspects, although creating and acquiring knowledge is statistically the most prevalent problem. Identification of knowledge is typically the minimum problem. Comparing the problems of knowledge management shows that problems associated with knowledge management do not vary significantly between types of community enterprises. Meanwhile, the number of members who have various kinds of problems regarding knowledge management requirements does vary significantly.

***Keywords*—**:Community Enterprise, Knowledge Management, Northeast Thailand, OTOP.

I. Introduction

A policy to promote and support community enterprises in developing communities to generate income and alleviate poverty for people at the local level by the meaning of community enterprise is integration of the business community within the community relating to products, services or other operation by people in the community [1]. According to data from the Thai government division promoting community enterprise in mid-2016, there were 79,601 groups, nearly half (38,575) of which are located in the Northeast [2]. However, community enterprises in the Northeast have a lack of knowledge management, such as marketing, production and accounting [3],[4]. The development of community enterprise to move towards standardization and efficiency requires a learning process and effective knowledge management. Therefore, knowledge management is a priority, and can be compared to learning and understanding of knowledge, including how to operate knowledge within an organization; knowledge is one of the development tools and solutions to effective organization [5]. Knowledge management is one way to strengthen an organization, as community members can participate in the creation of new ways of working and circulation of knowledge creation and knowledge management to work throughout the system and move towards a community of learning. The value of goods and services, and innovation in response to customer demand can strengthen the competitive advantage to an organization [6]. For the above reasons, the motive of interest in studying of Knowledge Management of Community Enterprise in Northeast Thailand is to get the proper knowledge management approach and benefit the community in the management of the business community to be successful in the future.

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II. Research Objective

This research aims to study the status and problems of Knowledge Management in Community Enterprise in Northeast Thailand.

III. Research Methodology

This research involved a survey. Samples used in the study were members of community enterprises in Northeast Thailand. Community enterprises were classified according to OTOP products (One Tambon One Product), including food, beverages, and textiles as well as clothing, decorative items and herbal food. The sampling method was conducted by probability sampling with stratified random sampling of 400 total samples at a confidence level of 95%. [7]. The questionnaire was used to collect data. It consisted of two parts: the first part was the background information and the second part was status and problems of knowledge management of community enterprise. Questionnaire are designed by a five-point likert scale. Reliability of the questionnaire was 0.95 tested by Cornbrash's alpha. Inferential statistics was applied. One-way ANOVA was utilized to compare the problems of knowledge management. The difference would be tested with Scheffe's multiple comparison test.

IV. Results

The analysis is divided into three parts: background information; status of Knowledge Management; problems of Knowledge Management as follows.

A. Background information

Background information includes personal data and information about the community enterprise. In background information, the sample was female (75.75%) and males (24.25%) aged between 51-60 years (36.00%), most completing primary education (42.00%) were farmers. (70.00%), the average income is between 5,001-10,000 baht (32.25%) state in the President (33.75%) Board (28.00%) and member (38.25%), information of the community enterprise is a manufacturer of fabrics and apparel (35.00%). The most common size of community enterprise organizations is between 11-20 people (42.50%).

B. The status and problem of knowledge management of community enterprise.

Analysis of status and problems of knowledge management are based on knowledge management processes such as identification, creation and acquisition, storing, distribution and application. Results are as follows:

1. The status of Knowledge Management

The status of knowledge management in community enterprise is based on knowledge management processes. The results showed that identifying knowledge was the most important characteristic of the work (26.00%). followed by government agencies recommendations (22.02%). acquiring knowledge, acquiring knowledge from internal and external groups to inquiries from professionals within the group (27.85%). external groups using field trip (27.63%). Knowledge creation found that mainly knowledge creation with practice (21.64%). Knowledge storing found that mainly knowledge storing with people (32.09%), knowledge storing with practice (36.19 %) knowledge distribution, 82.00 % use teaching methods, introduction, demonstrations to members and knowledge application, mainly applied in the development of new products (40.00%).

2. Problems of Knowledge Management

Study of problems of knowledge management found that knowledge identification, knowledge creation and acquisition, knowledge storing, knowledge distribution and knowledge application are a high level in all aspects. Knowledge creation and acquisition, with an average maximum is 3.54, followed by knowledge storing and knowledge application, both 3.53. Knowledge distributions with an average 3.48 and least level, Knowledge identification is 3.42 as shown in Table I.

Analysis found that the identified knowledge used in operating a job had significant problems, averaging 3.43. To determine who is responsible for knowledge management is at a moderate level, average of 3.40. For knowledge creation and acquisition, all items have significant problems in linking knowledge to learn (3.64), equipment to create knowledge (3.60), activities to promote learning and knowledge creation (3.59), technology support in accessing knowledge (3.53), acquiring knowledge of members (3.47), and the persons responsible for acquiring knowledge (3.39), respectively. With regard to knowledge storing, all items are at a high level, with tools and equipment in the store at the highest average of 3.54, persons responsible for knowledge storing and persons responsible for knowledge storing have average same 3.52. Knowledge distribution, the method or process of knowledge distribution have the highest average of 3.52, followed by activities to knowledge distribution (3.51), the persons responsible for knowledge distribution (3.43), knowledge application, bringing knowledge in practice, and linking knowledge to improve the operating job in a high level have averages of 3.57 and 3.48 respectively.

TABLE I: THE AVERAGE PROBLEM OF KNOWLEDGE MANAGEMENT

Item	$\bar{x}$	S.D.	Meaning
1. Knowledge identification	**3.42**	**0.75**	**High**
1.1 Persons responsible for knowledge identification.	3.40	0.82	Moderate
1.2 Identifying knowledge in practice	3.43	0.81	High
2. Knowledge creation and acquisition	**3.54**	**0.68**	**High**
2.1 Persons responsible for acquiring knowledge	3.39	0.85	Moderate
2.2 Acquiring knowledge of members	3.47	0.87	High
2.3 Technology support in accessing knowledge.	3.53	0.84	High
2.4 Linking knowledge to learning.	3.64	0.81	High
2.5 Equipment to create knowledge.	3.60	0.85	High
2.6 Activities to promote learning and knowledge creation.	3.59	0.78	High
3. Knowledge storing	**3.53**	**0.71**	**High**
3.1 Persons responsible for knowledge storing	3.52	0.75	High
3.2 To collect and store	3.52	0.83	High
3.3 Tools and equipment used in the store.	3.54	0.85	High
4. Knowledge distribution	**3.48**	**0.68**	**High**
4.1 Persons responsible for knowledge distribution	3.43	0.77	High
4.2 Activities related to knowledge distribution	3.51	0.76	High
4.3 Method or process of knowledge distribution	3.52	0.76	High
5. Knowledge application	**3.53**	**0.73**	**High**
5.1 Bringing knowledge in practice.	3.57	0.78	High
5.2 Linking knowledge to develop and improve operations	3.48	0.81	High
Total	**3.50**	**0.62**	**High**

When testing different problems associated with knowledge management by type for community enterprises and their members, the results showed that the types of community enterprises (food, beverage, textiles and clothing, decorative and herbal foods) were different, but the problem of knowledge management did not differ significantly. However, differing numbers of members in community enterprises had different kinds of problems associated with knowledge management with statistical significance, as shown in Table II.

TABLE II: TEST RESULTS FOR DIFFERENCES IN PROBLEMS OF KNOWLEDGE MANAGEMENT CLASSIFIED BY NUMBER OF MEMBERS IN COMMUNITY ENTERPRISE

Number of Members	Problem of KM.		Ranking
	$\bar{X}$	S.D.	
≤ 10	3.48	0.67	4
11 – 20	3.63	0.57	1
21 – 30	3.23	0.58	5
31 – 40	3.57	0.63	3
≥ 41	3.62	0.75	2
Total	**3.50**	**0.62**	
F = 6.220**			

After comparing differences of problems of knowledge management among different numbers of members with Scheffe method, results are shown in Table III.

TABLE III: COMPARISON PROBLEM OF KNOWLEDGE MANAGEMENT OF COMMUNITY ENTERPRISE WITH DIFFERING NUMBER OF MEMBERS

Number of Members	11-20	21-30	31-40	≥ 41
≤ 10	-0.149	0.250	-0.090	-0.136
11 – 20		0.399**	0.059	0.012
21 – 30			-0.341	-0.387*
31 – 40				-0.046

From Table III, the testing of different knowledge management problems in pairs found that community enterprises with 21-30 members had more statistically significant problems concerning knowledge management than community enterprises with 11-20 members or more than 41 members.

V. DISCUSSION

The study of Knowledge Management of Community Enterprise in the Northeast Thailand can be discussed as follows:

Knowledge identification is required to determine or define what the organization wants people to learn to achieve the policy, vision, mission and goals of the organization. The study found that community enterprises have difficulty in identifying the knowledge members needed to perform the job, Minor problems determining who is responsible for knowledge identification. Reference [8] suggests that corporate guidelines to manage knowledge and allocate resources efficiently and effectively are necessary. In order to establish an efficient and effective plan for knowledge management and resource allocation, organizations should define their policies for knowledge management to determine knowledge required. Who is responsible for knowledge should be divided into internal and external knowledge whereby internal knowledge is the wisdom of the group and external knowledge is modern knowledge or academic knowledge needed in the group [9].

Knowledge creation and acquisition of community enterprise by internal knowledge acquisition can be developed by asking experts within groups, whereas external knowledge can be pursued by attending study visits, workshops and seminars. This is in line with the research report [10], stating that group members acquired knowledge by consulting village specialists, attending study visits and seminars, as well as participating in workshops organized by external agencies. However, the group had problems with the appropriate material and equipment to create knowledge, as well as linking existing knowledge to what they have learned. Moreover, if members lack true understanding, they will be unable to apply new knowledge to existing knowledge. However, they still need to produce products, so, some products have poor quality [11].

With regard to knowledge storing, most knowledge relevant to the work is stored with individuals. Knowledge embedded in a person leads to problems of collecting and storing, including the tools and equipment used to store. Lwoga [12] added that the method agriculturists in rural area used to store knowledge was to use remembrance. In consequence, there were only few records, which had uncertain form. Nisara [13] also added that community enterprise lacked knowledge codification and refinement, including the systematic storing of knowledge. As a result, interested people were unable to access, exchange or transfer knowledge, particularly local wisdom.

Regarding knowledge distribution, community enterprises distribute knowledge by teaching, giving instruction and demonstrations which will help learners gain more insight, knowledge and understanding [14]. In regard to the problem with knowledge distribution and the method, the main cause is the ability of a leader to transfer and publish knowledge to community members, including the problem of using technology [8].

In regard to knowledge application, community enterprises mainly apply knowledge to develop new products. However, the research points out that the group has a high level of problems with knowledge application and the link between knowledge and development. This is to say, the community enterprise has knowledge but is unable to apply it to work or practice [15]. Therefore, it is necessary for the community enterprise to design appropriate learning processes and knowledge management, and upgrade and develop existing knowledge by integrating it with the new knowledge in order to enhance skills and work experience [16].

Research also suggests that different types of community enterprise, such as food, beverage, textiles and clothing, decoration and herbal foods, do not have different knowledge management problems. Because the characteristics of the community enterprise, which is a business community based on materials within the community, combined with local knowledge inherited from ancestors, create jobs in the community for the benefit of the community. Knowledge management of most villagers, according to the nature of the operation, rather than as a process based on the principle or theory of knowledge and valuable experience, knowledge embedded in people without the proper knowledge management has not been compiled or written notes and knowledge distribution systematically [13], while the number of members of the community enterprise are different. The problem of knowledge management is different. Test results indicate that groups of 21-30 members have less problems of knowledge management than larger groups (41 or more) and smaller groups (11-20 persons). We cannot assume that a group with few members will have less knowledge management problems than a group with many members. The size of an organization affects knowledge sharing within the organization. Thus, the increasing size and the complexity of an organization will decrease the efficiency of knowledge flow. Consequently, it affects the level of knowledge sharing in the organization. Nevertheless, other factors affect knowledge sharing, such as communication, relationships between individuals, organizational structure and teamwork culture [17].

VI. Conclusion

This study will help community enterprises plan effectively and can help organizations achieve a successful outcome. Conclusions are that knowledge identification is the first step of the process of knowledge management. Community enterprises should prepare a team, or responsible person, for co-operation, identification of knowledge important and essential to the organization, hence the organization knows what is present and what is lacking. Members should be facilitated and encouraged to acquire knowledge from both inside and outside the group, by asking experts within the group, or by undertaking study visits or attending training courses. Equipment should be supplied to promote learning for members, to help achieve integration, linking knowledge with previous experience, building new knowledge, and bringing knowledge gained from creating and developing the collected and storage methods, or by considering the guidelines for the collection.

If knowledge is tacit, there may be lessons learned, then saved to provide written knowledge. Explicit knowledge may rely on technology to help identify and record, which will help retain critical knowledge and can be searched and easy to use. The community enterprise must determine who is responsible for knowledge scrutiny, knowledge storing, knowledge distribution in various formats to improve organizational learning.

For knowledge distribution, Community Enterprises should know how to acquire knowledge appropriately such as using the processes of teaching, introduction, demonstration. However, knowledge distribution requires commitment. Transfer of knowledge is important, so community enterprises need to set clear goals for the purposes of knowledge acquisition, and utilize those who have the expertise and are ready to provide their knowledge, including applying knowledge gained from knowledge distribution, or applying appropriate expansion, or enhancing existing knowledge by bringing new knowledge through knowledge processes. Practical skills training leading to expertise will result in process efficiency, enhancing the competitiveness of the organization.

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