

Applied Information Technology in Community Economy: A Case Study of the Financial Institution of the Community, Chiangmai Province

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Abstract: This aim of this research was to 1) Study the operational process of the community financial institution, 2) Study the condition of using information technology in the community financial institutions, 3) Develop guidelines for the application of information technology, in the development of the community financial institution. This research was carried out by using a joint combination of quantitative samples, which includes 240 members of the community financial institution and a qualitative sample, which includes 30 people from the administrative and staff of the community institution. In terms of data collection, this research collected their data with questionnaires, interviews, and observations and group discussion. The data were analyzed to find the frequency, percentage, text synthesis and content analysis. The result of this researched showed that: 1) The result of data analysis on the operational process of the community financial institution was divided into 4 parts such as; 1) savings - deposit 2) loan and lending 3) Management of compensation and benefits 4) Management of the community financial institutions. 2) The condition of using information technology in the community financial institution, both hardware, and software were been supported by the bank in charge, but still not enough in terms of usage. Some staff still lack adequate knowledge, and skill for information technology. 3) Develop guidelines for the application of information technology for the development of community financial institutions. This was summarized into 3 issues: 1) In terms of hardware, they should be effective, efficient and suitable for work, they should also be sufficient for work. 2) In terms of software, they should be up to date developed software, responds to all segment of work levels. 3) In terms of personnel, the staffs should be encouraged and developed to gain more continuous knowledge and ready for work.

Keywords: Information Technology, Community Economy, Financial Institution

1. Introduction

Based on the situation of Thailand experiencing economic problems, which has a result affected the general population in rural and urban areas. The government, therefore, has a concept to stimulate and boost the economy from the grassroots level, using the Village and Urban Community Funds Policy in 2001. The purpose of this policy was to focus on solving the poverty-related problem of the people, by establishing a village community fund of 1 million baht each to be a source of flowing capital in the community. This allows the people to invest in their career, create jobs, generate income, reduce expenses, alleviate emergencies and urgent needs. This policy serves as a development tool in building "People" and "learning", which results to strengthen the community. [1] This was a way of boosting and stimulating the economy right from the grassroots foundations of Thailand, including the strengthening of potentials and economic strength of both the economy and society of the people in the village and the city.

Community Financial Institutions are a local organization that was raised from the Village and Urban Community Fund (NBTC) with objectives and benefits of helping villagers to have their financial organization at the community level. As a result, they can access funding sources that will help them start a business carrier at a more convenient level. They are also involved in taking care of properties. Which include self-supervised financial services and transactions. However, government banks have expanded their services by linking various businesses such as accepting payments for services to generate income and contribute to the welfare fund of community financial institutions. This will help attract community members to turn to community financial institutions. It also encourages committees and community members to develop management and development ideas aimed at creating a learning process that is formatted, open, ethical, and caring for collaborative learning. There is a sustainable and continuous network of funds at all levels. However, community financial institutions under the supervision of government bank can be considered as building a community of financial institution at the national grassroots foundation level, and it's also a path that leads to success in tackling poverty. It can help in improving the economy as a whole and improving the livelihood of farmers as well. The existence of Community Financial Institutions will provide farmers with easy and accessible funding sources. It is convenient for various transactions as it is located in the community. On the other hand, it also helps in educating the members of the community. [2].

Based on the policy of establishing village and urban community fund, currently, the government has a policy of continuing to develop a strong village and urban community fund to become community financial institution so

it will help provide financial services that can meet the needs of people in the community. Who lack access to funding sources and are unable to use financial services of general financial institutions following the objectives, criteria and standards set by the National Village and Urban Community Fund Committee. Based on current data collection, it found that there are both local and urban funds that can be established as community financial institutions. Besides, there are other villages and urban funds that are unable to develop and establish community financial institutions. [3]

The remainder of the dividend will be used to manage community welfare, which is a benefit that falls to the entire community. However, from the implementation of the community financial institution policy, it was found that there were still many operational problems which reflected many of the challenges, such as leadership skills, knowledge, the readiness of the facility for the operation, readiness of equipment and materials for operation, lack of publicity, consistency and participation in board meetings, lack of help from the Office of the Village and Urban Community Fund, lack of staff to volunteer, lack of continuity in the accounting system Including the lack of monitoring and evaluation of the performance of community financial institutions. Besides, community financial institutions are facing insufficient working flow capital problems. The deposit and withdrawal system are not up to standard, the regulations related to financial institutions are not clear and they lack guidance on the management and operations from central government staff [4] The Committee board needs to explicitly clarify their policies and training programs to educate the members to achieve conformity, resulting in the members' satisfaction and cooperation in participating with the financial institution community. Also, the committee board should improve operational methods, increase communication channels, and provide services to be up to date and in line with member needs. To enable the community's financial institutions, succeed in operation according to its goals. [5]

Each financial institution of the community has different policies and services in terms of deposits and loans. Therefore, to cover all the development of financial management systems for the financial institutions of the community of all financial institutions, become more challenging and interesting, Thus, it is important to consider the hardware and software that must always be up-to-date technology, as well as the level of expertise for the staff of each financial institution members with different limitations. Hence, if the financial institution of the community has an information system network to assist in their work, it will create a chance to help facilitate convenience for the committee. There will be operational reports, such as member information reports, savings information, loans information, utility bill payment information, and financial statements, both of which are statements of financial position, profit and loss statements, to analyze and formulate policies for the management financial institutions of the community. This will also allow the staff of community financial institution to have software they will use in facilitating the subscription system of the members, deposit system, credit system, and utility payment system to be better. [6]

According to the Data from the Department of National Village and Urban Community Fund 2001, Chiang Mai has 2,122 Village and Urban Community Funds, 66 were developed into Community Financial Institutions, therefore, there are still many villages and urban funds, that are looking to develop into community financial institutions. [7] Therefore, information technology systems are essential to the management of community finance. Nowadays, some various organizations and institutions use information and communication technology in a variety of ways, to help in knowledge management. Most of which are in the form of a website, however, the creators must possess adequate knowledge and expertise in creating a website programme and must also possess deep computer knowledge. Therefore, Website Technology becomes a limitation for agencies or small organizations, that do not have staff with sufficient knowledge, and there is no budget to hire experts to create a website to manage the organization's data. This result in ineffective management of small organizations.

Therefore, it is necessary to develop some guidelines for the application of information technology to develop community financial institutions and in solving community economic problems, one important factor to be considered is savings, loan. To help carry out the community economy in the field of production, marketing, networking and dissemination of information to the wider society, from the said problem and importance, this makes the research team pick up interest in studying the application of information technology in community economic development. Case Study of Community Financial Institution, Chiang Mai Province. To make them useful information data used in the planning of the development of community financial institutions. As well as improving the efficiency and effectiveness of the community financial institutions, be of benefit to the organization, community, society, and members, who are the key to sustainable development.

2. Research Objectives

1. To study the operational process of the community financial institution
2. To study the condition of using information technology in the community financial institutions

3 Develop guidelines for the application of information technology, in the development of the community financial institution.

3. Research Methods

This research was carried out using a Mixed-Method Research Methodology

The quantitative research: A sample survey was done, and it consists of administrators and staff of community financial institution in San Sai District, Mae Rim District, Hang Dong District, San Pa Tong District, Mae Taeng District, Saraphi District and Doi Saket District. Chiang Mai, a total of 240 people out of a total of 8,928 members. The sample was randomized by quota random method. The sample size was calculated using the formula of Taro Yamane. Data were collected with a questionnaire; it had confidence at 0.845. The data were analyzed using a software package for social science research. The descriptive statistics used were frequency, percentage, mean and standard deviation. The qualitative research was carried through a focus group from 30 key informants.

4. Research results

Objectives 1 : Information on the Operational Process of Community Financial Institutions: According to the study and document related data, on studying the operational process of Community Financial Institution, it consists of the following (1) Savings – Deposit (2) loan and lending 3) Management of compensation and benefits 4) Management of the community financial institutions.

Objective 2 : The condition of using information technology in the community financial institution. According to the result of the study, it showed that,

2.1. The condition of using information technology in the community financial institution showed that most of the computer's lifespan is under 5 years, accounting for 83.3%. Everyone using it, have internet accounting for 100% without a website, accounting for 93.8 per cent. Most of them use a personal computer, accounting for 100%. In terms of the computer’s performance, most of them are not capable enough accounting for 15% and the number of printers is enough.

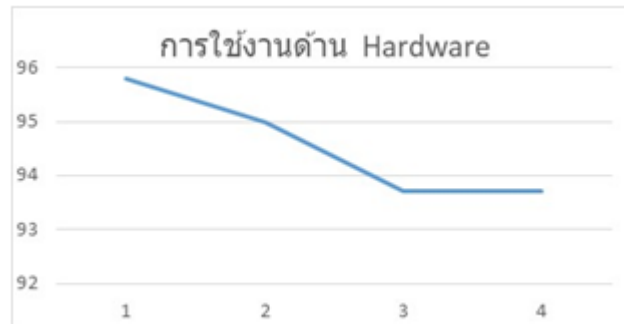


2.2. Information on how to use the application programs in community financial institutions, according to the result of the research, it found that the community financial institutions used varieties of application programs. The most used programs were financial -accounting system, followed by **Microsoft Word** and **Microsoft Excel**.

Program	Mean (\bar{x})	Standard deviation (SD)	Variance
Financial-Accounting System	4.8	0.922	The Most Used
Microsoft Word	3.8	0.938	Much Used
Microsoft Excel	3.5	0.921	Much Used
Total	4.03	0.927	Much Used

Table 3: Shows Information on the Program Used by Community Financial Institutions

2.3. Hardware operability information: The result of the research showed that most of the Sub-district Administrative Organization were unable to perform hardware tasks. check/repair computers at 95.8 %. Installing operating system (OS) 95.0% and Installing peripherals such as printers, scanner, including the installation of programs to be used for work accounted for 93.7%



2.4. Problems and Barriers Including Suggestions for Information Technology

1. In terms of Hardware 1) The internet system is slow, causes the workflow to be delayed as well. 2) The computer is efficient, but It is inconsistent with the capability of the new programs. 3) There is no clear information technology plan. 4) In terms of the maintenance budget, some departments are not defined in the action plan. 5) There are an insufficient number of computers 6) There are inadequate uninterruptible power supplies (UPS) posing some risk in terms of saving data and the use of other various devices

2. In terms of Software 1) The software used do not have legitimate user rights, such as Microsoft office 2) Used software from support agencies such as banks, result in some limitations in some areas the that Community financial institutions needed 3) lack of budget for software development 4) lack of cooperation among community financial institutions

3. In terms of Personnel 1) They lack some knowledge in terms of information technology 2) No plans to develop personnel in information technology 3) Insufficient

IT staff

Objective 3 : Guidelines for the application of information technology, in the development of the community financial institution.

3.1 In terms of Hardware: They should prepare a database of all information technology equipment, do some data surveys and make purchasing plans for adequate information technology equipment for operation: such as computers, printers, uninterruptible power supplies, scanners, and network equipment, create a repair and maintenance plans, such as machine checks, virus removal and cleaning.

3.2 In terms of Software: They should develop a website for dissemination of information to members and make use of them in the management of community financial institutions. They should have an information system that dispatches information through mobile phones, such as time to pay bills, outstanding invoices. They should develop a system to connect with other systems, such as the community economy, this will help in the usage of such data for consideration of loan to another agency or fund for the ability to invest. They should develop a monitoring system of fund usage according to the objectives of the loan. The software applications should be up to date and supports changes in all aspects

3.3 Personnel: There should be a continuous human resource development plan in information technology because most of the personnel have little competence in information technology, they should be able to manage knowledge in finance, accounting, and information technology areas. They should develop the personnel to have basic knowledge of finance, accounting, and information technology before taking the training in the use of community financial institutions management system, there should be enough personnel with full knowledge of finance, accounting, and information technology.

5. Discussion of Research Results

The use of information technology with community financial institution. There are many problems and obstacles from both hardware and software that are not up to date, resulting in slowdowns and rapid technology changes. This went following Khanchit Malaiwong et., al they said there is an insufficient budget for purchasing development and maintenance of computer because information technology is developing rapidly and continuously, [15] However, Lucas, Henry focused on wireless technology and modern technology [16]

Application programs in community financial institutions: This is a program that the bank had provided free of charge together with computer. The banks are responsible for training and they serve as a mentor, but there are

limitations in the field of use, such as the ability of the staff in charge Community financial institution system concerning accounting and information systems. Most of them are people within the community, they are unfamiliar with the system. This result in error-prone operations. This went following Sunthorn Sakritthee that found out that the preparation of the data for information lack some hardware and software specialist. Administration and management does not have the correct system and the working system should be based on computer management [17]

Use of information technology: The personnel of the community financial have little knowledge, understanding and skills in information technology. Currently, information technology has many roles in working. The usage of computers in financial management, accounting and various fields to be efficient, convenient and fast, which some personnel still lack some knowledge in Information technology, therefore lack of information technology knowledge is a barrier to modern operations according to Zorkoezy [18] and Wimon Eiyamplad [19], who found that community financial institutions still faced a shortage of knowledgeable personnel with the understanding of information technology. The personnel lack systematic training in Information technology policies. However, they should be established and given priority to the users, creators, controllers and technology beneficiaries.

6. Suggestions

The findings from this research should be utilized in 3 levels as follows:

1. Government policy: The government should develop the community financial institution system and develop the community economy systematically. Allow them to be strong towards self-management 2. Budget: The community financial institution should allocate enough budget for purchasing maintenance and repair of information technology and also the development of personnel 3. There should be a plan for the continuous development of the personnel knowledge in information technology

7. Conclusion

Application of information technology in community economic development: Case studies of community financial institutions, Chiang Mai Province.

1) The result of data analysis on the operational process of the community financial institution was divided into 4 parts such as; 1) savings-deposit 2) loan and lending 3) Management of compensation and benefits 4) Management of the community financial institutions. 2) The condition of using information technology in the community financial institution, both hardware, and software were been supported by the bank in charge, but still not enough in terms of usage. Some staff still lack adequate knowledge, and skill for information technology. 3) Develop guidelines for the application of information technology for the development of community financial institutions. This was summarized into 3 issues: 1) In terms of hardware, they should be effective, efficient and suitable for work, they should also be sufficient for work. 2) In terms of software, they should be up to date developed software, responds to all segment of work levels. 3) In terms of personnel, the staffs should be encouraged and developed to gain more continuous knowledge and ready for work.

References

1. Department of Community Development (2004). Professional Capital Management: Case Study of Village Fund and Urban communities. Bangkok: Thailand Dance Express.
2. Chaihirunkarn, T. (2007). Success factors of community financial institutions in Chainat. MA. (Public Administration), Mahidol University. [In Thai]
3. Sirikwan Wichianphelit. (2015). National Village and Urban Community Education Report. Bangkok: Parliamentary Budget Office the Secretariat of the House of Representatives.
4. Saichon Panchit. (2012). Development of Village Funds to Community Financial Institutions: Knowledge and Proposal to the Truth, Journal of Academic Resources 23, 3 (Sep.-Dec 2012) 148-163
5. Supaporn Wongraktrakul (2007). Factors Affecting the Success of Provincial Community Financial Institutions. Udon Thani. Master of Arts Thesis. Kasetsart University, Department of Cooperatives Graduate school at Kasetsart University.
6. Martiskainen, M. (2017). "The Role of Community Leadership in the Development of Grassroots Innovations." Environment Innovation and Societal Transitions. 22: 78-89.
7. Yuwaret Poonlapsawat, Supornchai Sirivohan, Churairat Chulajakawat. (1998). The Development to Village and Urban Fund to community Financial institute: Chiangmai Province Journal of Graduate Research. Vol. 5 No.1 (2014): January-June 2014.
8. Lertwongsatien, C, Wongpinunwatana, N and Achakulwisut, A 2004, „Adoption and diffusion patterns of e-commerce in SMEs “, in NAY Al- Qirim (ed.), Electronic commerce in small to medium-sized enterprises: Frameworks, Issues and implications, Idea Group, Hershey, PA, pp. 107-26.

9. Sangsit Phiriyarangsarn (1998). Community economy, self-reliance, philosophy, status and future. In self-reliance community economy: concepts and strategies. Bangkok: Department of Provincial Administration.
10. Office of the National Village and Urban Community Fund. (2004). Handbook for the people. to prepare for the establishment and operation of the village and urban funds. Bangkok: Secretariat premier.
11. Wanchai Meechat. (2009). Organization management. No. 3. Bangkok: Chulalongkorn Publishing House University.
12. Siriwan Serirat, Somchai Hirankitti and Thanawat Tangsinsiri. (2007). Management and organizational behaviour. Bangkok: Tira Film and Citex
13. Sakorn Suksrivong. (2009). Management: from an executive perspective. (3rd edition). Bangkok: Publishing House GP Cyber Print.
14. Somkid Bang Mo. (2010). Organization and management. Bangkok: Wittayaphat.
15. Khanchit Malaiwong. Et al. (1996). Going further with computers Computer facts Civil servants must know (Revised edition '39). 4th edition in Bangkok:
16. Lucas, Henry. 1997. Information Technology for management. New York: McGraw-Hill.
17. Sunthornsak Rithee. 2008. The use of information technology among personnel in administrative organizations. Tha Ngio Subdistrict Mueang Nakhon Si Thammarat District Independent Study Report, Master of Public Administration Local government branch Local Government College Khon Kaen University.
18. Zorkoezy, Peter. 1984. Information Technology: An Introduction. New York: Van Nostrand Reinhold.
19. Wimon Eaimplad (2008). Community Financial Institutions System. Master's thesis in Internet and information technology Naresuan University.