“10 ปี adiCET กับการพัฒนาพลังงานเพื่อท้องถิ่น”

A Model of Community Data System Management Process by Digital Community Center and Citizen Involvement

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Key Findings

1. Community data usage requirement.
2. Community data management systems.
3. Community data system management process.

Introduction

This research was conducted according to the environmental issues in Mae Tao Basin area. The study aimed to encourage community citizen in the study area to use data to solve problems and develop their communities. The objectives of this research were: to study community data usage requirement, to develop a prototype of community data management system, and to establish a structure of community data management system with the digital community center and people involvement.

Research framework

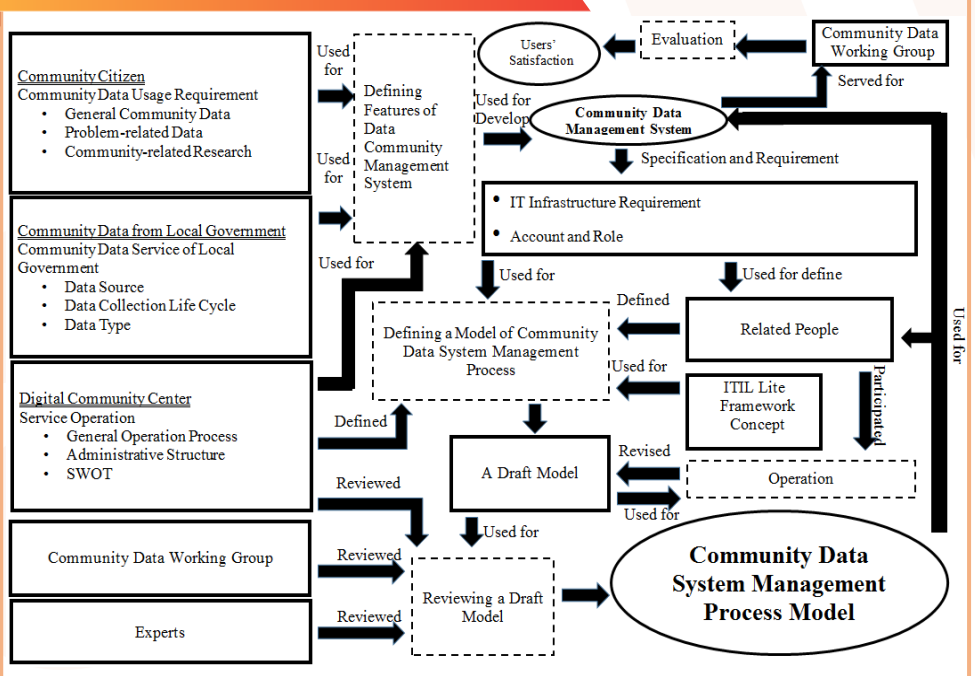


Figure 1. Conceptual research framework

Exploring data usage requirement

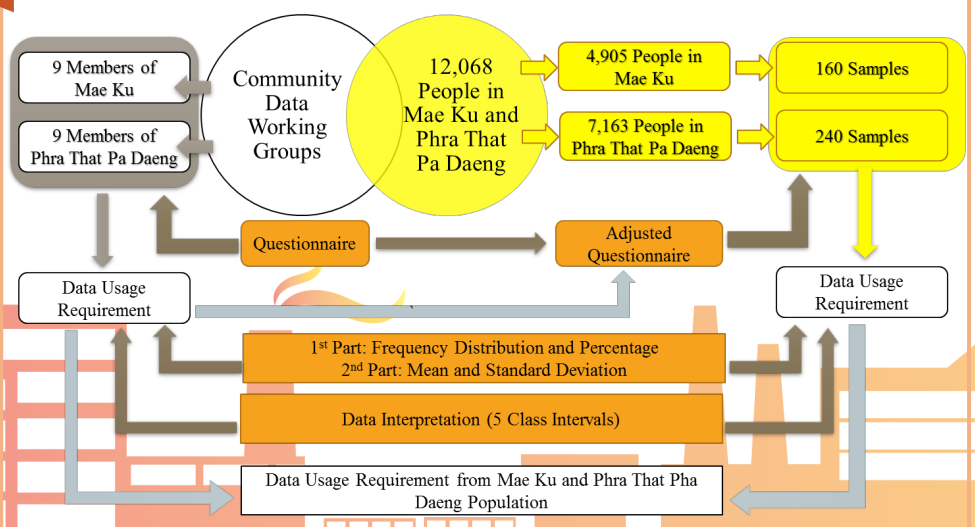


Figure 2. Procedure for exploring data usage requirement

Developing a prototype of community

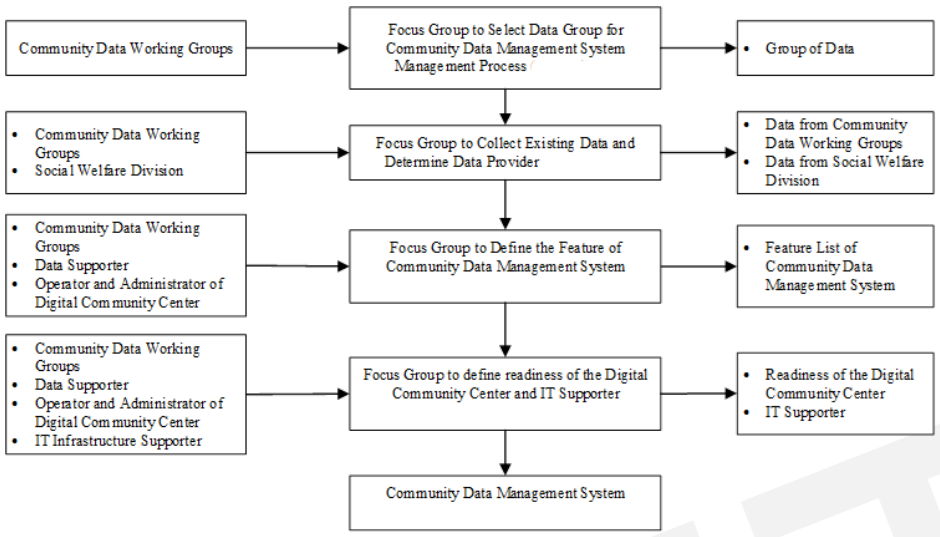


Figure 3. Procedure for developing a prototype of community .

Creating a model of community data system management process

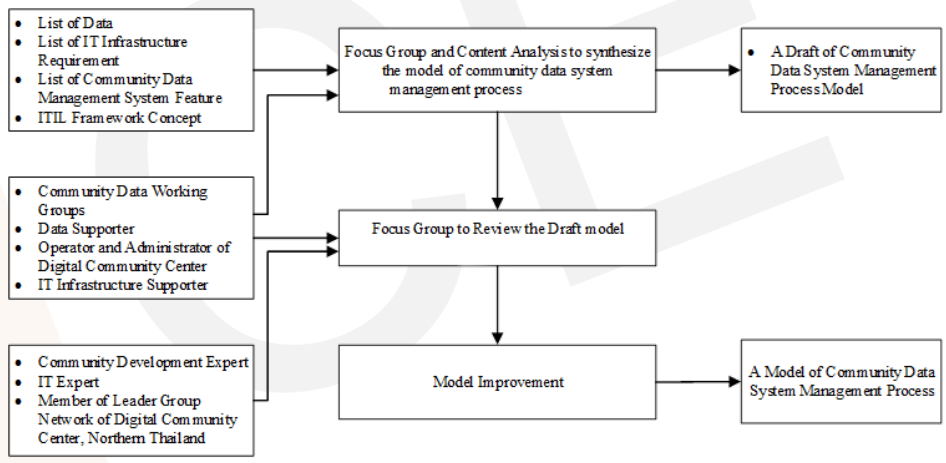
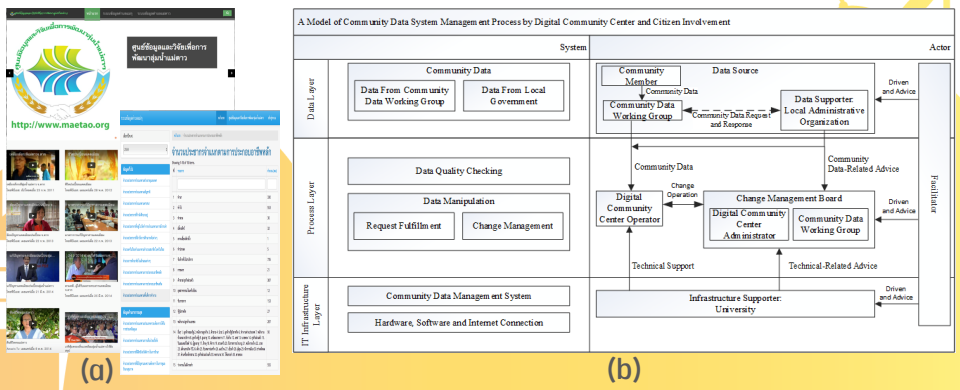


Figure 4. Procedure for create a model of community data system management process by digital community center and citizen involvement

Results and Conclusion

Community data usage requirement included 8 essential items and 6 additional data required by the community. The prototype of community data management system was divided into two web-based subsystems developed using the MVC architecture shown in Figure 5(a). A research survey was conducted to evaluate the system. Results showed that users were satisfied with the overall system at a high level. Community data system management process shown in Figure 5(b) consisted of 7 components: community data working group, the operator and the manager of the Digital Community Center, providers, community data, process, IT infrastructure, and facilitators.



(a) (b)

Figure 5. (a) Community data management system
(b) A model of community data system management process