

MAPPING AND TRAINING OF POTENTIAL INFORMATION SYSTEMS IN URBAN AND RURAL IN THAILAND

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ABSTRACT The high figure of population of Thailand indicated that it is a challenging task to mapping information system comprising demography, socio-economy characteristics. The primary aim of the study is to map and train potential information systems that can effectively serve both urban and rural communities. The method of community service work involved community engagement and participatory approaches to identify the needs of different areas. The results indicate that the project successfully identified the unique challenges faced by urban and rural areas and proposed tailored solutions to address these issues. It was found that support and training are needed to ensure the sustainability of the information systems developed.

KEYWORDS: *Community Engagement, Information System, Rural, Training, Urban.*

1. INTRODUCTION

The exploration of potential information systems in both urban and rural settings in Thailand is a critical endeavour that addresses the unique challenges and opportunities present in these diverse environments. The population of Thailand stood at 71.85 million in January 2024 and it means that it is a challenging task to mapping such information system (Tantirat et al., 2020). As urban areas continue to expand, the need for efficient information systems that can support infrastructure, governance, and public services becomes increasingly vital (Milakovich, 2021). Conversely, rural regions often face distinct obstacles, such as limited access to technology and resources, which necessitates tailored solutions that can enhance connectivity and information dissemination (Ferrari et al., 2022). This project aims to map and train potential information systems that cater to the specific needs of these contrasting landscapes.

Urban areas in Thailand are characterized by rapid growth and modernization, leading to a surge in demand for sophisticated information systems (Adulkongkaew et al., 2020). These systems play a crucial role in managing urban infrastructure, traffic, and public services, thereby improving the quality of life for residents. The integration of smart technologies can facilitate real-time data collection and analysis, enabling city planners to make informed decisions that enhance urban living conditions.

In contrast, rural areas in Thailand often grapple with issues such as limited internet access and inadequate technological infrastructure (Benyaapikul, 2021). The development of information systems in these regions must prioritize accessibility and usability to ensure that local communities can benefit from technological advancements. By focusing on user-friendly platforms, rural information systems can empower residents, promote local governance, and foster economic development.

The training aspect of potential information systems is equally important, as it ensures that users are equipped with the necessary skills to utilize these technologies effectively. Training programs tailored to the specific contexts of urban and rural areas can enhance user engagement and promote sustainable practices (Aderibigbe et al., 2023). This paper will explore various training methodologies that can be employed to maximize the impact of information systems in both settings.

Furthermore, the mapping of potential information systems involves a comprehensive analysis of existing technologies and their applicability to the Thai context. This includes evaluating current infrastructure, identifying gaps, and proposing innovative solutions that align with the needs of urban and rural populations. By conducting a thorough mapping exercise, stakeholders can better understand the landscape of information systems and make informed decisions regarding future investments (Oghenekome Urefe et al., 2024).

In addition, the development of potential information systems in Thailand requires a nuanced approach that considers the distinct characteristics of urban and rural environments. By mapping these systems and implementing targeted training initiatives, it is possible to create a more connected and informed society. This project will delve into the methodologies and frameworks that can facilitate this community work, ultimately contributing to the advancement of information systems in Thailand.

2. METHOD

In cooperation with Lukmanul Hakeem School in Yala, Thailand, the community service project was carried out as a one-day event on October 30, 2024. Many students, young people, and teachers and lecturers from Indonesia and other countries who lived in Thailand participated in the community service project.



Figure 1. The community service project in Lukmanul Hakeem School

There were four primary sections to the workshop:

1. Overview of the program of mapping and training of potential information systems in urban and rural
2. Exercises for the example of application
3. The establishment of the data comprising the characteristics of youth
4. A session for peer sharing and remarks

Booklets with activities and suggestions to help with the program of mapping and training of potential information systems in urban and rural were given to participants. Facilitators conducted informal interviews and participant observations to collect qualitative data.

3. RESULT AND DISCUSSION

The community service project focusing on mapping and training potential information systems in urban and rural Thailand aims to enhance digital literacy and improve access to information. This initiative is crucial for addressing disparities in information access and fostering community empowerment. By leveraging Geographic Information Systems (GIS) and community information databases, the project seeks to create a robust framework for effective service delivery and resource allocation, such as depicted by Figure 2.

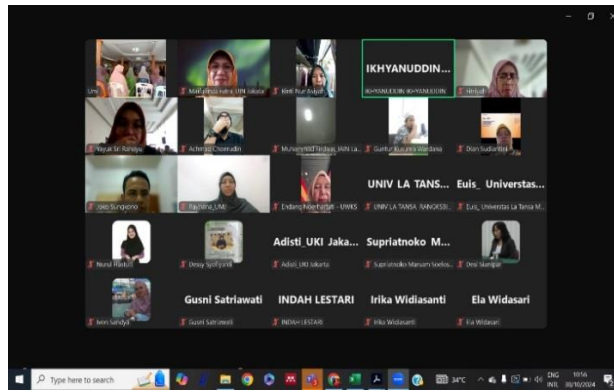


Figure 2. Author as the speaker at the community service project

The result of this project is discussed below:

a. Mapping Information Systems

Mapping information systems involves utilizing GIS to identify and analyze community needs. This technology can highlight areas with limited access to digital resources, particularly in rural regions. It also could facilitate targeted poverty alleviation programs by mapping socio-economic data. In addition, it backed the previous research on urban planning and service delivery by visualizing community demographics and resource distribution (Kontokosta & Hong, 2021).

b. Training and Capacity Building

Training programs are essential for enhancing digital literacy among community members. The project would develop tailored training curricula to address the specific needs of urban and rural populations. It would foster collaboration among local government agencies to ensure comprehensive training delivery as well. Later, such finding is in-line with utilizing community learning centres as hubs for training and information dissemination (Detlor et al., 2022).

c. Community Empowerment

Empowering communities through information systems is a primary goal. This can be achieved by establishing community information databases that allow residents to access vital information, so that it will encourage community participation in the development and management of these systems, as it is corresponding to many related projects about community empowerment (Alam, 2022).

4. CONCLUSION

The project emphasizes the importance of improving digital literacy among communities in both urban and rural areas in Thailand. This is crucial for bridging the gap in information access and ensuring that all community members can benefit from available resources. By mapping and

training potential information systems, the project seeks to create a more equitable distribution of information resources.

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CONFLICT OF INTERESTS

We declare that this community service work had no conflict of interest.

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