

Participatory Decision Support System for Tourist Route Design and Destination Planning The Case of Koh Kred, Pak Kred, NONTHABURI

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Abstract

The research objectives were 1) to assess the original resources, the readiness and the need for the decision support system of Koh Kred subdistrict administrative organization and tourists of Koh Kred, Pak Kred, Nonthaburi, 2) to design a decision support system for tourism development planning of Koh Kred subdistrict administrative organization and a decision support system for tourist route planning of Koh Kred, Pak Kred, Nonthaburi on the created database system 3) to develop a decision support system for tourism development planning of Koh Kred subdistrict administrative organization and a decision support system for tourist route planning of Koh Kred, Pak Kred, Nonthaburi on the created database system. This research has been completed and delivered Web application and Mobile application to Koh Kred subdistrict administrative organization. The data was collected from questionnaires and distributed the questionnaires to population of 130 people.

The results of mobile application for tourist route planning proposed that respondents satisfied at the highest level; including the benefit of mobile application content, accuracy of tourism development planning. Moreover, the results of web application found that respondents also satisfied at the highest level; including precision and relevant of information, and benefit of web application content.

Keywords: *Decision Support System, Tourist, Koh Kred*

I. INTRODUCTION

From previous study in the communities of Ko Kred area, Pak Kred, Nonthaburi in terms of environment, society, economic, tradition and culture we found that this interesting area was attractive. Koh Kred is in the central of Thailand and closes Bangkok. It is the only one island on Chaopraya river and is the oldest settlements of Mon people. There are many things to do and many places to go in Koh Kred. Most tourists from America, Africa, Europe and so on always come to travel

famous places e.g., Wat Poaramai Yikawat and buy souvenirs and learn how to do handmade pottery [1]. Moreover, they are happy to taste original Mon's food e.g., Khao Chae and so on. From above mention, tourists have to plan time for travel.

The Collaborating faculties of Rajamangala University of Technology Suvarnabhumi, Nonthaburi, we find the problems and requirements from communities to develop Ko Kred areas. We discover that Ko Kred communities have to promote their area.

II. LITERATURE REVIEW

From previous survey, we found that data and management of tourism were ambiguous and untidy such as community members, area administrators and tourists [2][3]. These have not been collected systematically and they have still made some problems for tourists for example when tourists arrive on the Ko Kred area and they do not know how to travel to attractions locations, how long they can buy and shop in limited time. Although some signs point to the important places on the area that they are shown in wrong direction and outdated. Moreover, there are many pathways, some signs are too small and unclearly. Tourists may not see those signs obviously; they are not possible to travel to destinations within the specified time. In addition, the community have commented that installed signposts without planning may have an effect on tourists.

These factors make the tourism management of Ko Kred are still limited and they are not based on the right system. The data storage and the creation of a system for managing tourism-related information systematically can help increase the tourism competitiveness of the Ko Kred area. They proposed that the increased outcome of the communities come from developed tourism and sustainable society [4] [5].

III. METHODOLOGY

Research project on decision support systems for tourism route design and tourism development planning Based on community participation towards the sustainability of Ko Kred area Pak Kred District Nonthaburi Province. The scope of the research has been defined as follows:

Data is collected from Ko Kred District, Pak Kred District, Nonthaburi Province that consists of seven villages:

- Village No. 1: Ladd Kred
- Village No. 2: Sala Kun Nok
- Village No. 3: Ban Sala Kun Nai
- Village No. 4: Khlong Khlong Namoi
- Village No. 5: Tha Nam
- Village No. 6: Sao Thong Thong
- Village No. 7: Ong Ang

As mentioned earlier, this research separates into two parts as follows:

1. From the collected cultural data, shops, production sites are analyzed in order to design a database to support tourism in the area of Ko Kred on web application,
2. From the collected geographic information, landmarks, tourist are used in order to design a tourism planning system in the area of Ko Kred on mobile devices

Research procedure include these following details:

- I. Assessing the original capital, the readiness and requirement for the decision support system of Ko Kred:
 - a. explore the area by collecting and analyzing data and in-depth interviews about products in the community, including handmade pottery, local food, restaurants, accommodation and famous places for tourism management of the local area
 - b. assess the quality of each tourist location based on the expertise of the specialists
- II. Use the obtained information to design a database for system development to help promote and develop tourism.
- III. Design a decision support system for tourism development planning of Ko Kred Subdistrict Administration Organization and the decision support system for tourism tourist route planning of Ko Kred area, that relying on the database system

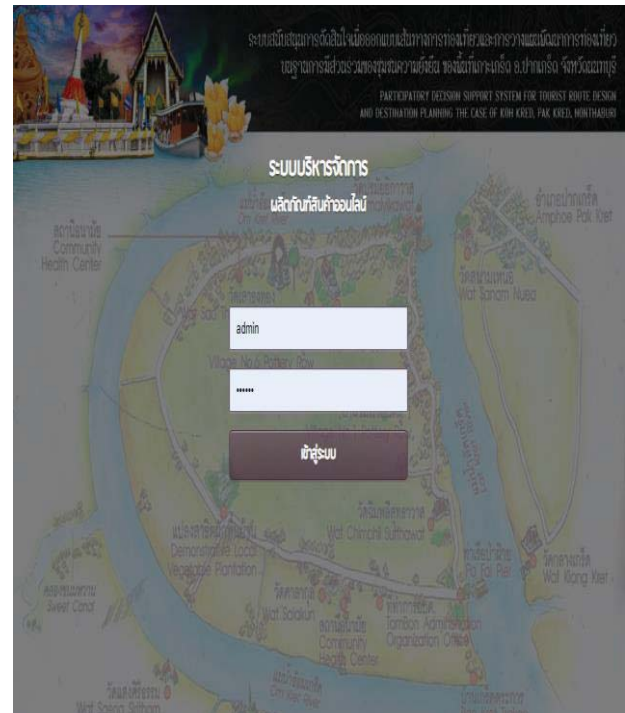


Figure 1. Home

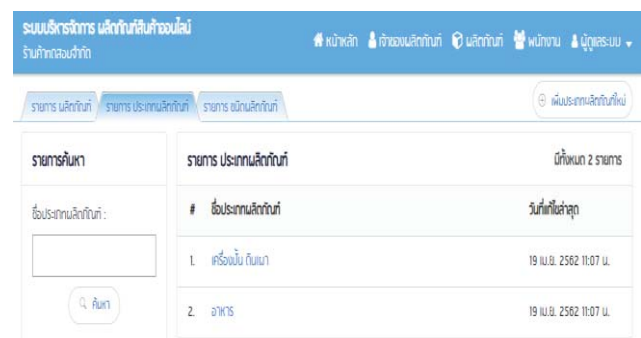


Figure 2. Product



Figure 3. Employee

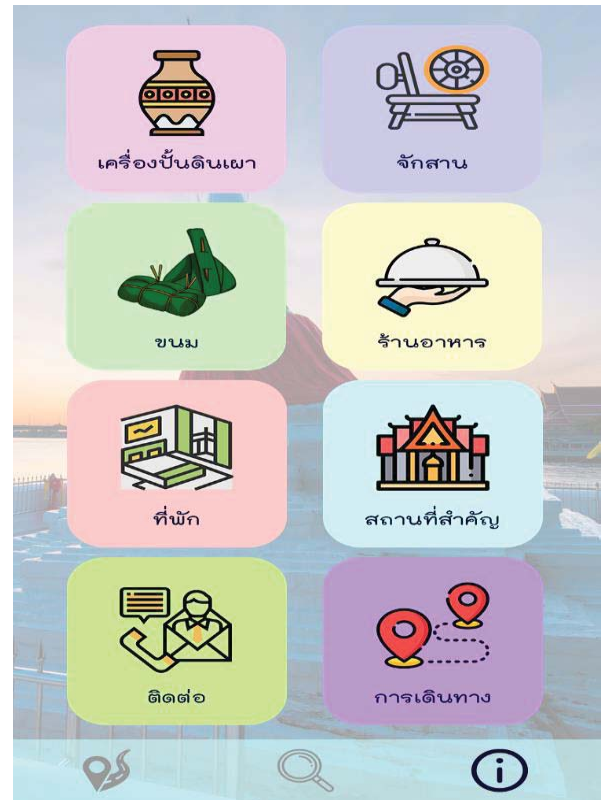


Figure 5. List main menu



Figure 4. Main menu

IV. CONCLUSION

The findings of the decision support system for tourism route design and tourism development planning based on community participation towards the sustainability of Ko Kred area Pak Kred District Nonthaburi Province. After collecting data by using questionnaires and distributing the questionnaires to the population of 130 people, found that in the application for tourism route planning Respondents responded at the highest level, including the benefits of the content of the application. Accuracy of tourism development planning by distance and the website section for the decision support system for tourism development planning. The results have shown that there are at the highest level, including clarity and to the point of the information on the website, the benefits from the content of the website.

ACKNOWLEDGEMENT

Thank you for Thailand Science Research and Innovation and Rajamangala University of Technology Suvarnabhumi for supporting this work.

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