



The 14<sup>th</sup> National and International Conference  
"Global Goals, Local Actions: Looking Back and Moving Forward "2021  
18August, 2021

---

## The Development of Mobile Application for Famous Temples Tourism Promotion in Suphan Buri

Frank Vanhentenrijk<sup>1</sup>, Thongchai Surinwarangkoon<sup>2</sup>, Sutha Pongthawornpinyo<sup>3</sup>,  
Varangkana Chitrphan<sup>4</sup>, and Chinoros Thinwilaisakul<sup>5</sup>

<sup>1</sup>Punch Powertrain NV, Belgium

<sup>2</sup>College of Innovation and Management, Suan Sunandha Rajabhat University, Thailand

<sup>3,4</sup>Faculty of Management Science, Suan Sunandha Rajabhat University, Thailand

<sup>5</sup>College of Communication Arts, Suan Sunandha Rajabhat University, Thailand

### Abstracts

The objectives of this research were to study information about attractions of famous temples in Suphan Buri and develop mobile application for famous temples tourism promotion in Suphan Buri. This is a survey and development research. The development consisted of studying of system demands from 500 samples, database and system design, application program development, functionality test, and performance evaluation from users. The application program was developed by using Android Studio Integrated Development Environment (IDE) and Java programming language. The registered users can access the tour with a navigation system, history of records, reviewing and comments. The average user satisfaction was at 4.54 which the system was useful in providing tourism information, tourist attraction, and locations of famous temples in Suphan Buri, appropriately.

**Keywords:** Mobile Application, Development, Tourism promotion

### Introduction

Nowadays, information and communication technology has become an important role in human lives as well as the use of mobile phones for communication between individuals and organizations. Worldwide, there are many users of information and communication technology which, due to the large number of internet users and mobile phone users (Thinkaboutwealth, 2019). It is an opportunity for individuals or organizations to use these technologies as a tool to present tourism information so that they can truly meet the needs of consumers (Suchada, 2010). Especially in the form of applications, which can be downloaded for use on mobile phones. They are more prominent to use in disseminating



The 14<sup>th</sup> National and International Conference  
"Global Goals, Local Actions: Looking Back and Moving Forward "2021  
18August, 2021

---

various information to be wider and reach more people. At present, tourism plays an important role and is a very important index in the development of economic and social progress in Thailand. However, Thailand still has a wide variety of tourist attractions both in terms of history, culture, nature and many others that can be upgraded to be a quality tourist destination and ready to serve to generate income for the country (Tourism Authority of Thailand (TAT), 2019). Suphan Buri is a province with many interesting tourist attractions both historical, natural and religious sites. It can be seen that Suphan Buri is considered one of the provinces with diversity in culture, customs, traditions and buildings which are attractive to both Thai and foreign tourists (Tourism Authority of Thailand Suphan Buri Office, 2019). However, although Suphan Buri has many temples attractions, but when compared to other provinces such as Bangkok and Phra Nakhon Si Ayutthaya, it is still considered relatively less popular. This may be due to the lack of detailed and clear information to be used in the decision making of tourists. Therefore, it was foreseen that the development of a mobile application for 9 temples, which will have detailed information and the location of the temples, directions to the temple location and information of tourist attractions, restaurants and accommodation around Suphan Buri, etc., will increase the channel for publicizing information about the famous temples of Suphan Buri to more tourists and also to promote tourism in secondary cities according to government policies as well.

### Research Objective

The objectives of this research were to study information about attractions of famous temples in Suphan Buri and develop mobile application for famous temples tourism promotions in Suphan Buri.

### Research Scope

The scope of mobile application development for famous temples tourism promotion consisted of user log in. Subscription members can access information in the application. They can exchange additional information and express their opinions. For some users, which are not members, they will be able to view details within the application only. They can view information for a trip to all famous temples, which will guide them to visit the temples. They can choose information about 1 day trip and 2 days 1 night trip. Member users can provide additional information or suggestions for additional travel and reviews.



The 14<sup>th</sup> National and International Conference  
"Global Goals, Local Actions: Looking Back and Moving Forward "2021  
18August, 2021

---

## Literature Review

### 1. *Information on Attractions of 9 Temples in Suphan Buri*

There are many temples in the surrounding area of Suphan Buri province, 9 famous temples are as follows (suphan.biz/Watpalalai, 2019)

1.1 Wat Pa Lelai Worawihan, it is related to the famous literature of Thailand, namely Sapha Khun Chang Khun Phaen. Nirat Muang Suphan Khor Sunthorn Phu. At present, Wat Pa Lelai has the status of a third-class royal monastery, Worawihan type.

1.2 Wat Khae, a large tamarind tree, Wat Khae which is an old temple with a name. The sound appears in folk literature, which is a cultural heritage of Suphan Buri people and the nation, entitled "Khun Chang Khun Phaen", a large tamarind tree, which has around a circle about 10 meters, and 15 meters high.

1.3 Saraphi Temple, Indra-shaped Erawan elephant, large in the viharn beside the Ubosot of Wat Saraphi. It is believed that going through the belly of an elephant is a blessing.

1.4 Wat Phra Loi, Naga Prok Buddha image enshrined in the viharn of Luang Pho Phra Loi. It is a stone Buddha image in the posture of subduing Naga Prok. Judging from the artistic style, it is assumed that it is a Buddha image in the Lopburi period, aged around the 18th century.

1.5 Reclining Buddha Temple, Ratthasimakunakornpiyachat Her Royal Highness Princess Maha Chakri Sirindhorn Located on the waterfront in front of the temple There are many kinds of fish in abundance. By the way, the temple was declared a sanctuary area near Macha Park. "Guan Im Shrine", where interested people can visit here to pay homage to the goddess. Next is the Reclining Buddha Viharn, which is a Vihara in the shape of a tetrahedron.

1.6 Piharn Daeng Temple, Phra Phutthathosaphonyanmahamuni, two sacred Buddha images at Wat Piharn Daeng. It is a Buddha image in the attitude of subduing Mara. It is assumed that it was built since the late U-Thong period, about 700 years old. It had discovered a viharn in the area near Ban Phlu Luang has been renovated using red as the main to commemorate Later, Wat Wihan Daeng be called distorted as "Wat Piharn Daeng"

1.7 Wat Chee Sukkasem, there is a 1,000-year-old Buddha image inside the temple. This standing Buddha image is a very old Buddha image. There is evidence that it is about 1,000 years old, built in the U-Thong period.

1.8 Wat Sawang Arom, it is a famous temple known generally because of the prestige of Luang Pho Li, former abbot a monk have beautiful ethics strictly adhere to the



The 14<sup>th</sup> National and International Conference  
"Global Goals, Local Actions: Looking Back and Moving Forward "2021  
18August, 2021

---

discipline and people across the country. It is said that Luang Pho Lee is the one who has the right word.

1.9 Wat Phra Sri Mahathat, it was located in Tambon Rua Yai on the west side of the Suphan Buri River, Somphan Khong Road separates from Malaiman Road for about 300 meters. In the past, it was the center of Suphanphum city. It is assumed to be at least 600 years old.

## Methodology

### 1. Sampling and sample characteristics

The population of the study was the tourists in Suphan Buri. To be able to develop the system to meet the needs of users, therefore researchers collected user needs by using a questionnaire on the needs of an application feature for traveling to famous temples in Suphan Buri. 500 samples were selected from tourists in Suphan Buri by random sampling.

### 2. Research tools

Questionnaires were used as research tool. Statistics in terms of percentage and rating scale were used for data analysis. Android Studio and Java language were used for mobile application development.

## Data analysis and findings

The general information of the respondents is gender, status, age, occupation, average monthly income. Number of times to visit temples per year. It was found that most of the respondents were female, 56 percentages, and 44 percentages were male. Most of them are in the age range of 21-30 years old, single, educational level is lower than a bachelor's degree. Most of them are workers. The average monthly income is less than 15,000 baht. Most of them travel to temples 1-3 times a year and know the famous temples through the internet. The results of the analysis of the needs of the mobile application format for famous temples tourism promotion in Suphan Buri, it was found that the respondents had the needs about the application as a whole was at the highest level, with an average of 4.54. Considering for each item, it was found that the mobile applications were required to be able to search for tourist attractions accurately; 4.72, quickly; 4.64, with fast processing; 4.64, stable to use at all the time; 4.64, with complete and accurate information; 4.60, hassle free login; 4.56, good designed and unique; 4.54, respectively. The respondents required terms of application usage as follows: navigation system to tourist attractions, with an average of 4.52, easy to use, 4.46,



The 14<sup>th</sup> National and International Conference  
"Global Goals, Local Actions: Looking Back and Moving Forward "2021  
18August, 2021

very convenient and easy to download, 4.36, and exchange of opinions between users, 4.32, respectively.

### Research Result

The development of mobile application for famous temples tourism promotion in Suphan Buri was as follows.

#### 1. Main page and Login page

From fig. 1 in the login page section, it will be the home page of the application. by showing the login subscriptions for new users and the general user section who are not members. The registration page was illustrated in fig. 2 which the user can fill in the information and save member information by confirming the information with e-mail, password and confirm password. Then click the subscribe button and click the Login button to log in to the system.



Figure 1: Main page



The 14<sup>th</sup> National and International Conference  
"Global Goals, Local Actions: Looking Back and Moving Forward "2021  
18August, 2021



Figure 2: Registration page

## 2. Navigation page

From fig. 3, the navigation to a total of 14 places; with 9 temple locations, namely Wat Pa Lelai Worawihan, Wat Khae, Wat Saraphi, Wat Phra Loi, Wat Phra Non, Wat Phiharn Daeng, Wat Chee Suk Kasem, Sawang Arom Temple, and Wat Phra Sri Mahathat. 2 attractions are Heavenly Dragon Park and Banham Jamsai Tower, 2 restaurants and accommodation: Tharaburi Restaurant and Garden Restaurant. One place to buy souvenirs is Ekachai Sali, the center of souvenirs. General users and members can click on pin and click the button on the bottom right side. That is an arrow shape to bounce to the Google Map page which leads to be able to navigate.



The 14<sup>th</sup> National and International Conference  
"Global Goals, Local Actions: Looking Back and Moving Forward "2021  
18August, 2021

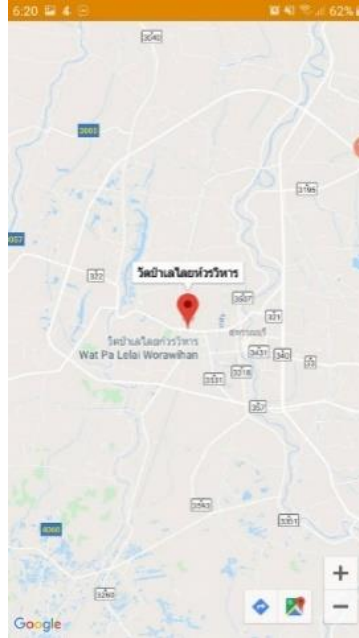


Figure 3: Navigation page

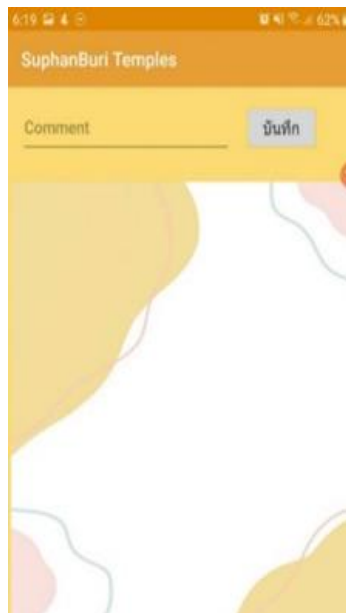


Figure 4: Review and comment page



The 14<sup>th</sup> National and International Conference  
"Global Goals, Local Actions: Looking Back and Moving Forward "2021  
18August, 2021

---

### 3. Review and comment page

Fig. 4 is for members only who can review or comment. They can type their comment in the comment field and press save button to display the message in the screen.

### Conclusion

From studying and collecting data by real groundwork such as temples, accommodation, restaurants and tourist attractions of famous temples in Suphan Buri province in order to collect the correct information and develop an application for famous temples tourism promotion in Suphan Buri. Then researchers develop an application for traveling to famous temples on the Android operating system which the system was developed according to the needs of users. It was found that the developed mobile application for famous temples tourism promotion in Suphan Buri was able to search for attractions accurately and quickly fast processing. The system was stable to use all the time with complete and accurate information. The application was designed to be functional and unique. It can support navigation system. It is easy to use, convenient and easy to download data. The application can support opinion exchange between registered users, with the functionality of the part of the subscriber where the user's information, email address and password were stored in the system.

### References

- Apichart Khamplew, Chaninthorn Chalermasuk & Kriengsak Chuamsombat (2018). *Recommended application development. Tourist attractions in Thailand with virtual reality technology*. Retrieved September 2, 2019. (Master's Thesis, Southeast Asia University).
- Suchada Plachaipiromsil. (2010). *Trends in the use of mobile applications*. Retrieved on September 19, 2019. (Master's Thesis, Bangkok University).
- Suphanburi Province. (2019). *Wat Pa Lelai Worawihan*. Retrieved on September 24, 2019, from <http://www.suphan.biz/Watpalalai.htm>.
- Thinkaboutwealth. (2019). *Users of Information and Communication Technology*. Retrieved on September 3, 2019, from [www.thinkaboutwealth.com](http://www.thinkaboutwealth.com).
- Tourism Authority of Thailand Suphan Buri Office. (2019). *History of Suphan Buri Province*. (online). Retrieved on September 3, 2019, from [www.suphan.biz](http://www.suphan.biz).



The 14<sup>th</sup> National and International Conference  
"Global Goals, Local Actions: Looking Back and Moving Forward "2021  
18August, 2021

---

Tourism Authority of Thailand (TAT). (2019). *Action plan to promote tourism*.  
Year 2019. Retrieved on September 20, 2019, from  
[https://www.tourismthailand.org/fileadmin/downloads/pdf/Summary of  
Promotion Action Plan Annual travel 2019.pdf](https://www.tourismthailand.org/fileadmin/downloads/pdf/Summary_of_Promotion_Action_Plan_Annual_travel_2019.pdf).