

From Local to Global with Online Museum: Sirindhorn Wararam Phuprao Temple in Museum Pool

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Abstract

The study aims to enhance the body of knowledge for creating an electronic museum for a local attraction and a museum tour route for the community during COVID-19 pandemic and lockdown in Thailand. The site, Sirindhorn Wararam Phuprao Temple, was purposively sampled as it is the center of the Glowing City in Sirindhorn district, the borderline of the province. After the researcher were trained to manage Museum Pool, the data was collected in three different forms: information, pictures, and videos. The research instruments were semi-structured in depth-interview, documentary, and photography. The interviewers were the abbot, the artist, and three local people collaborating with the temple. The results were 30 exhibitable objects with pictures and information both general and local one. The information was transcribed into three languages: Thai, English, and Esan dialect. Additionally, videos were created to depict the museum and the community. The exhibition can be viewed via website, application, and QR codes for free. In brief, Museum Pool can be a meaningful application supporting e-tourism during COVID-19; also, another way of information retrieval. More local museums created and managed by local people should be researched and exhibited as meta data promoting tourism in the project site so that the application will be fully beneficial for the country and global citizens.

Keywords: Online Museum, Museum Pool, Sirindhorn Wararam Phuprao

Introduction

Due to COVID-19 pandemic during 2019-2021, world economy has been directly affected, tourism industry in particular (Baldwin & Mauro, 2020; Isaac Wale-Awe, 2020; Report, 2020; and Worldometer, 2020). According to the Tourism Authority of Thailand (TAT), foreign visitor numbers could drop by 60% from 39 million in 2019 to 16 million in 2020. The Governor of TAT also stated in April that Thai tourism will not recover until a vaccine is developed, which might take a year. TAT estimates that foreign tourism receipts will drop to one trillion Baht in 2019, down from 1.9 trillion Baht in 2018 (Parpart, 2020). The estimated financial damages in Thailand from various sectors owing to the coronavirus outbreak this year are roughly \$5-6 billion; it was estimated economic loss in tourism for \$1.52

Billion (Kittisilpa, 2020). Other business related to tourism have been accordingly affected, for examples food, local business, and education.

People have encountered problems to journey, to find information, and to educate themselves about the world (Isaac Wale-Awe, 2020); creating a new way to travel and gain information and knowledge is essential. Museum Pool, the technology investigated and developed by National Electronics and Computer Technology Center (NECTEC) since 2018 might be the answer as a new method to travel in Thailand with images, videos, and intriguing information, as well as other material that could help promote the local tourism sector and business in the long term.

Thai nation's art and wisdom are all worthy of preservation so that the next generation can learn and be aware of their origins, as well as cherish the cultural heritage that has been passed down from generation to generation. Information technology storage for conservation and information retrieval can be searched with images, sounds, and videos including important documents of history, ethnicity, religion, and local traditions, which are rare documents requiring careful storage to prevent damage to the documents. Information technology can help manage without damage. Collecting wisdom and art objects can be stored and managed by using information technology, also known as "Electronic Museum" (e-Museum). E-museum is a type of conservation technology that uses technology to aid in the collection of antiquities and to slow the deterioration of historical objects caused by unconscious touch of human beings. It is also easily accessible to disseminate and approach to information and knowledge without causing damage to the historical objects.

The most common cultural excursions were visits to sites provided for educational purposes and knowledge about culture. Therefore, visiting a museum is one of the most important ways. Presentation of information in the museum is diverse from the description of the audio guide to the information cabinet with pro and con. The description of the object displayed may not provide enough information or the text is too small to read; an audio guide can provide insights to visitors though there may be concerns about hygiene when headphones are to be shared. Information cabinets can be a great option; however, the use of smartphones as a medium to provide information about exhibits is a popular concept in many countries in Europe, America and Asia, so this is a more interesting option. According to 2015 smartphone user statistics, there are up to 24 million people who own mobile phones, accounting for 29 percent of total mobile phone users (83 million). These resources can be used to create a mobile museum tour application.

The study aims to enhance the body of knowledge in order to create an electronic museum and a museum tour system for the community during COVID-19 pandemic and lockdown in Thailand. The site, Sirindhorn Wararam Phuprao Temple, was purposively sampled as it is the center of the Glowing City in Sirindhorn district, the borderline of the province. Ubon Ratchathani Rajabhat University (UBRU) as the university for local areas takes parts as a researcher and a community mentor empowering the community to manage and update their own information in Museum Pool website and application so that they could meet cultural and economic sustainability.

Objective

To Study Local to Global with Online Museum: Sirindhorn Wararam Phuprao Temple in Museum Pool.

Literature Review

Museum Pool

With the 2021 memorandum of understanding between National Electronics and Computer Technology Center (NECTEC) and Ubon Ratchathani Rajabhat University, the researcher team is allowed to create a community museum in the university service area. The topics discussed below are definitions of museum, Museum Pool and the operational summary.

1. Definitions of Museum

Museums take roles as exhibition venues managing information technology by gathering and showing objects in specific ways: arts, cultures, sciences, history and others; additionally, they promote life-long learning through studying the exhibition which leads to pleasure along with appreciation and to learning and self-discovery skills (Techathawiwan, 2016).

In accordance with the International Council of Museum: ICOM (2019), a museum is an institute permanently established for non-profit purposes and for developing and serving society and general people to collect, conserve, research, communicate, and exhibit objects or evidences which are important to both visible and invisible cultures of human beings and environments; mainly it purposes for learning, education, and pleasure with the main duty to conduct research from objects and collect information about the national history, culture, studies, and publications. The presentation and exhibition are to educate both domestic and global citizens (Koompoka, 2015: 2752).

Primarily, museum provides services for two aspects: internal museum and external services (Charoenphon, 2005; Department of Fine Arts 1993; and Hutangkun, 2011). The external services including exhibition possibly present objects and information with meaningful contents. The exhibition has to be considerably engageable designed with clear goals. In addition, it provides better audience participation with various audio-visual materials make possibly higher learning and comprehension, especially ones in digital era (Sanguantung, 2010 and Waracome, 2012).

2. Museum Pool

According to National Electronics and Computer Technology Center Report of Transferring e-Museum and Museums Guide Technology for Community-Based Tourism (2018), “Museum Pool” is an application to meet the needs of historical and cultural tourists, helping to navigate museums in Thailand through personal mobile devices such as mobile phones or tablets both in the form of viewing the museum in a real place visitors can view the contents of the exhibit in detail by reading the QR code attached to the object. The content includes images, sound and video, which viewers can get to know the basics of the exhibits as well as being able to study information from multiple museums in a single application Increase convenience, speed and meet the needs of travel planning in accordance with the lifestyle of modern tourists.

The NECTEC research team initiated the idea of developing a “Museum Pool” that consists of two main parts. The first part is the front-end system that connects to the museum audience. Acts as an aid to the museum visit since traveling to the actual place until visiting various objects, the second part is the back-end system.

In the beginning, NECTEC research team used RFID technology to develop audio guides to help guide visitors to the museum. then developed further into a mobile application. In order to expand the user base to increase more, NECTEC has received promotion and support from another good partner, the National Research Council of Thailand allocating funds to support the use of research results and innovations. especially in the part of increasing

learning channels and studying history and culture with digital technology. through the knowledge of the museum which at present General users can visit the museum through the “Museum Pool” application by downloading the “Museum Pool” application on your mobile device Both Android and iOS operating systems, so the use of technology to create interest in the museum. Therefore, it is another option that is easy and without additional cost, fun, and gains knowledge on Thai history and culture.

The NECTEC research project goal is to enhance the body of knowledge in order to create an electronic museum and a museum tour system for the community, and to link research findings to the benefits of tourist development via the idea of community participation. Its purpose is to promote tourism in the area. Spatial differences will be analyzed and the broadcast results will be analyzed more concretely with the stakeholders by the researcher to collect cultural information and cultural attractions according to metadata designed by the NECTEC researcher by selecting the target locations that are important in tourism or have development potential, have strong communities together with a network of experts researchers visit the area to create understanding, disseminate, publicize, educate and train ‘train the trainer’, a course on building an electronic museum (e-Museum) and a museum guide system via smartphone (Museum Pool) for local educational institutions.

When digital cultural data is created and imported into the system, the research team will bring such information into a mobile application form. A display system has been created that will allow users to view the browsing behavior data. tourist museum Items that tourists are interested in, With the project implementation framework as shown in Figure 1, the researcher will follow up on the usage data. To be used as a supporting data for analysis of usage results to see various behaviors in relation to community participation and tourism.

By using various statistics to analyze in analytics as well so that those involved in tourism promotion can use these statistics to use in planning or appropriate tourism activities.

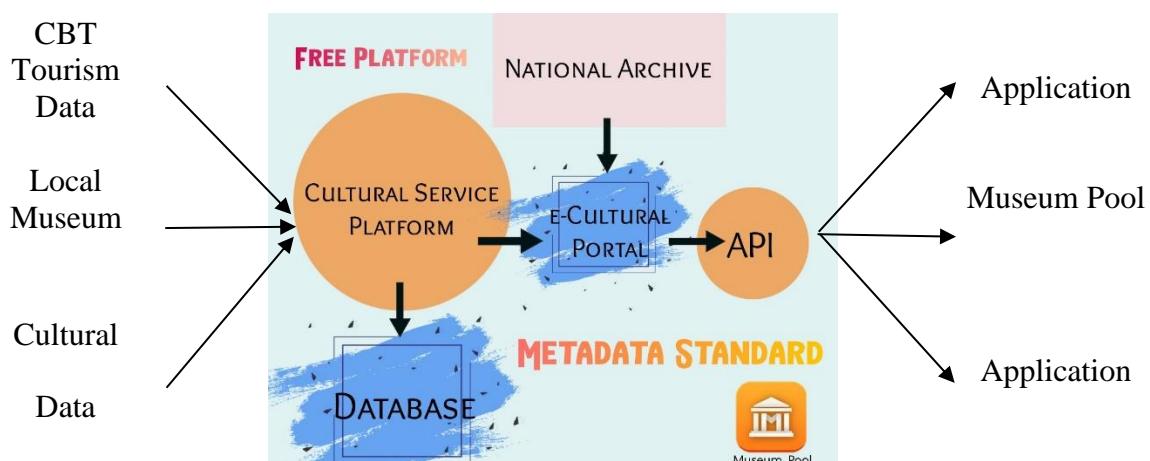


Figure 1: Museum Pool NECTEC Framework

The framework aims to contribute both museum Pool website and application to promote local tourism for sustainable cultural and economic activities. The community is able to have their own website managed and updated by themselves.

With cultural service platform, the present study aims to enhance the body of knowledge about the site, Sirindhorn Wararam Phuprao Temple, in order to create an electronic

museum and a museum tour system for the community during and after COVID-19 pandemic and lockdown in Thailand. The data collection will be presented in the next section.

Research Methodology

After trained 'Train the Trainer' for, the researcher team consisting of 5 students and 2 mentors brainstormed to work in the community selected. The research is designed in qualitative manner. The theme the study is 'Prosperous Dhamma City' and the concept of the museum is 'The Glowing Kalapapruek, the Origin of fertility in the Himmapan forest according to Buddhist beliefs spreading the light of Dharma, glowing, illuminating into life.'

Data Collection

The present study was designed as following:

1. Site and Participants:

The site purposively selected is Sirindhron Wararam Phuprao Temple: The Glowing City since it is in the service area of the university. In addition, arts and culture provided in the temple is unique and the site is potentially developed in terms of tourism, which can be a key for sustainable economy of the community.

The participants were 5 community leaders: the abbot, the temple artist, a retired teacher who commits herself to work for the temple, one staff in the traditional medical center and a women community leader.

2. Instruments:

The study was designed in qualitative manners; the data would be obtained in a form of texts, pictures, and video clips.

a) Semi-structured in-depth interview: interview questions for each participant were set for obtaining the information about the background, community, and activities or festivals. All of them were open ended questions. All of the participants have studied the letter of consent and allowed the team to collect the data and take pictures and videos of themselves.

b) Photography: the team planned for the 30 objects taken into the e-museum (See https://www.museumpool.com/thne_watsirindhorn/home) including videos of the landscape, scenery, and activities provided during the data collection period.

3. Procedures:

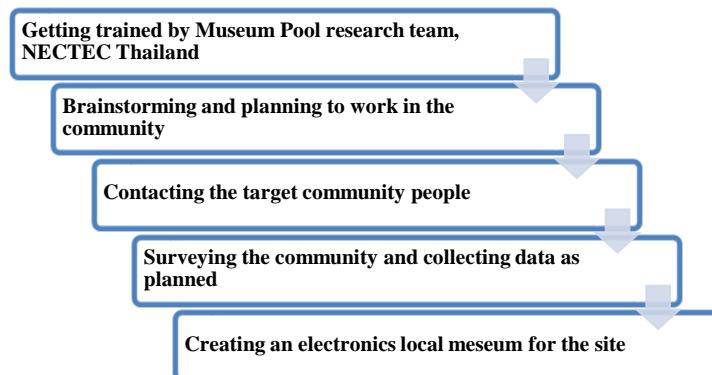


Figure 2: Procedures Museum Pool NECTEC

After that the e-museum would be open both on the website and on the application. Then, the team would collect more data to create a museum tourism route for the community and let them learn how to apply the museum to the local tourism system.

Data Analysis

The data would be qualitatively analyzed and created to exhibit in the e-museum due to their outstanding characteristics. The interview data were transcribed and analyzed with content analysis, to

Research Findings

Sirindhorn Wararam Phuprao is located close to Thai Lao borderline. It has been the center of the communication for a long time. With initiation of the temple abbot, the temple was designed and created with meaningful purposes different from other temples in this country. First, it was designed to engage people to visit the temple during evening to nighttime though generally temples are not popular places for people at night. Instead, people keep going to the temple because they want to appreciate illuminating arts around the temple. Second, the temple architecture and arts have been designed in accordance with the myth about Himmapan Forest referring to prosperity of all creations. Also, physical life elements: earth, water, wind, and fire which are fundamental Buddhism belief. The four corners of the monastery are filed with the four elements to remind people we are all the same and will meet the same destination, death.

In addition, as the temple is the community center, some activities have been originated here such as Thai herbal learning center and Sirindhorn Folk Horse Conservation Club.

The results of the 30 subjects were placed in a map with number. The map is mainly used for tracking the e-museum both online and on site.

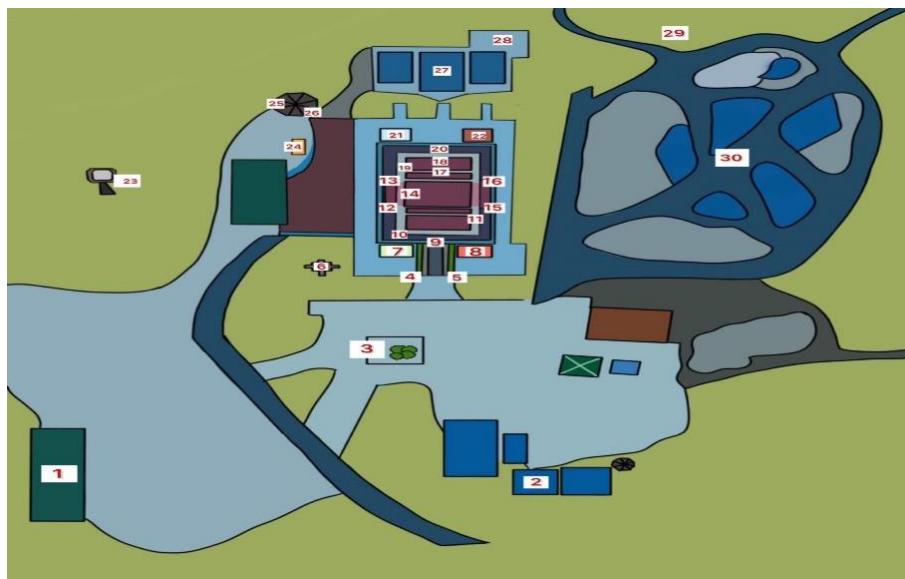


Figure 3: Sirindhornwararam Phuprao E-Museum Map

The following 30 items are objects selected to exhibit in the e-museum, Museum Pool.

1. Thai Herbal Learning Center
2. The herbal house A- Ki- La-Nang
3. Gandharvas
4. A bird with a human head
5. Kinnaree
6. Phra Ajarn. Kamolphawanakorn (Sithon Kamalo) Monument (the 2nd abbot)
7. The wind element is the right-hand point in front of the monastery
8. Fire Element (the monastery front on the left)
9. Naga with three heads – the pair in front of the monastery (north)
10. Kodchanaka (Mixed Elephant and Naga)-Hang Hong
11. The pavilion
12. Kochasri
13. Kochaphaksa
14. Iklanang Herbal House
15. Bird of paradise
16. Kraisorn Paksa
17. The main Buddha image of Wat Sirirathon Wararam Phu Prao
18. Phra Kru Kamol Bhavanakorn's vision
19. A picture of a Kunchorn or elephant in the Himmapan forest
20. 'Kalaprepreuk' tree
21. The water element is the right-hand point behind the monastery
22. Earth element (behind the monastery - on the left)
23. Phra Ajarn Boonmak Thitipanyo Monument (the first abbot)
24. Luk Nimit
25. Kongrit Laothong's oil paintings
26. Hin-Ma-Praow
27. The Three Pavilions
28. Phu Marong Viewpoint
29. Sirindhorn Folk Horse Conservation Club
30. Anodat Pool

The item information: item title, short description and long description are provided. Along with pictures of the items and clips, the visitor can hear audio of the descriptions in Thai, English and Esan dialect (See https://www.museumpool.com/thne_watsirindhorn/home). In addition, QR codes to approach the items are provided, for examples:



Figure 4: The Kalaprepreuk Tree



Figure 5: The Fire Element

The visitor could access the e-museum by using QR codes via website and before the e-museum was officially open, the community people had approached to the information for rechecking and reconfirming for all. The participants had learned how to use the application and hopefully they could transfer it to other community people.

Discussion/Conclusion

The present study aims to create an e-museum for a community, along with 30 object items and to create a museum tour route so that sustainable tourism can occur in the community. With MOU between NECTEC Thailand and UBRU, the team was trained to apply Museum Pool as the e-museum creator. The site selected is Sirindhorn Wararam Phuprao Temple in Sirindhorn district, Ubon Ratchathani as the university service area. To gather information, photos, and video clips, the researcher team collected the data from the community. The object item descriptions have been created based on the in-depth interview to five community leaders. Photos and video clips were mainly originally produced by the team; additionally, some photos and clips have been allowed to use for educational purposes only.

The e-museum can be viewed at https://www.museumpool.com/thne_watsirin_dhorn/home. Plus, the application Museum Pool is ready to download for both iOS and Android phone systems, and QR code for free.

In addition, the museum tour routes including potential tourism attractions: natural attractions, food products, the Glowing Market, Ikilanang-the herbal house, Lai-mats by the disabled in the district, and local accommodations, are crated so that the community could promote themselves and have more income during COVID-19. With the new tourism technology, community in the future can manage the museum by themselves and they could have another tool for communicating to tourists and global citizens about how their community are worth to visit and more income from community-based tourism could be possible.

In short, Museum Pool can be a meaningful application supporting e-tourism during COVID-19 and also another way of information retrieval. More local museums created and managed by local people should be researched and exhibited as meta data so that the application will be fully beneficial for the country and global citizens.

Suggestion

The extended purpose of the study is to create the museum tour route including potential attractions, arts, foods, local products, and accommodations. The information obtained from the community people are presented below.



Figure 6: The e-museum Tour Route

The community, Sirindhorn district, has variety of tourism resources, and they could be categorized into six groups here in the e-museum tour route: natural attractions, food products, the Glowing Market, Ikilanang-the herbal house, Lai-mats by the disabled in the district, and local accommodations. The information could be gather as an interesting story about the site to let local and global communities learn about Sirindhorn district and its religious and cultural capitals. In addition, the online museum could be expanded to other areas to promote cultural tourism and keep updating the information.

References

Baldwin, R., & Mauro, B. W. di. (2020). *Mitigating the COVID Economic Crisis: Act Fast and Do Whatever It Takes*. In Ewi-Vlaanderen. (1st ed.). Retrieved from <https://voxeu.org/content/mitigating-covid-economic-crisis-act-fast-and-do-whatever-it-takes>

Charoenphon, P. (2005). *Museology*. Faculty of Archaeology, Silpakorn University. Bangkok: Silpakorn University.

Department of Fine Arts. (1993). *Performance of the Curator National Museum, Fine Arts Department*. Bangkok: Department of Fine Arts.

Hutangkun, T. (2011). *The Universal Meaning of The Museum and The Development of Museum of Siam*. Retrieved from <http://www.finearts.go.th/inburimuseum>

Isaac Wale-Awe, O. (2020). *STRIDES EDUCATIONAL FOUNDATION The Covid-19 pandemic lockdown: Curtailing the negative economic impacts*. Bizecons Quarterly, 8, 3– 14. Retrieved from <http://www.bequarterly.rysearch.comhttp://www.bequarterly.rysearch.com>

Kittisilpa, J. (2020). *Chinese tourists desert Thai resort as coronavirus spreads - Reuters*. Retrieved September 27, 2021, from Reuters website: <https://www.reuters.com/article/us-chinahealth-thailand-phuket/chinese-tourists-desert-thai-resort-as-coronavirus-spreads-idUSKBN1ZV3CX>

Koompoka, S. (2015). Thai National Flag Museum Management. *Silpakorn University Journal of Social Sciences, Humanities, and Arts*, 8(2): 2750-2765.

Parpart, E. (2020). *BOT cuts policy interest rate while Thai baht strengthens with hopes for tourism recovery » Thai Enquirer. Thai Enquirer*. Retrieved from <https://www.thaienquirer.com/13308/bot-cuts-policy-interest-rate-while-thai-bahtstrengthens-with-hopes-for-tourism-recovery/>

Report, S. I. (2020). *Travel, Tourism & Hospitality / Statista. In Statista*. Retrieved from <https://www.statista.com/markets/420/travel-tourism-hospitality/>

Sanguantung, K. (2010). *The Design Aesthetic Perception Through Exhibition Design*. Master Thesis, Virtual Communication Design, Silpakorn University.

Techathawiwat, W. (2016). *Information Literacy for Project Writing*. Bangkok: Department of Library and Information Science Faculty of Humanities and Social Sciences Srinakharinwirot University.

The International Council of Museum. (2019). *Definition of museum*. Retrieved from <http://archives.icom.museum/definition.htm>

Waracome, S. (2012). *Concept for Exhibition*. Retrieved from <http://sanghnung.blogspot.com>

Worldometer. (2020). Coronavirus Cases. *Worldometer*, pp. 1–22. <https://doi.org/10.1101/2020.01.23.20018549V2>