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Preliminary Study for Developing a Digital Data Platform for Intangible Cultural Heritage in Vachiraphayaban Subdistrict, Dusit District, Bangkok

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Abstract

This study aimed to develop a digital platform for documenting and sharing the intangible cultural heritage of Vachiraphayaban Subdistrict, Dusit District, Bangkok, through community participation. The platform was designed to increase public awareness, strengthen local cultural identity, and support the preservation of cultural heritage through digital technology. Vachiraphayaban Subdistrict has a rich cultural heritage, including traditional food, local crafts, and religious sites, many of which are not widely known outside the local community. This study adopted a Participatory Action Research (PAR) approach, involving researchers, community leaders, and local residents throughout the research process. The participants included people involved in the preservation and management of intangible cultural heritage in Dusit District. Using purposive sampling, 12 participants were selected, including government officials, academics, local administrators, community knowledge holders, entrepreneurs, and representatives from both the public and private sectors. In addition, 17 key informants took part in focus group discussions to provide information on the documentation, preservation, and promotion of local cultural heritage. Data collected through in-depth interviews and focus group discussions were analyzed using triangulation and analytic induction. The findings identified two main categories of intangible cultural heritage: (1) social practices, rituals, traditions, and festivals, and (2) traditional craftsmanship, with a total of 11 heritage elements. Based on these findings, an interactive e-book was developed to present and preserve the documented cultural heritage. The e-book includes voice narration, video clips, accessibility features for people with visual impairments, privacy protection, mobile-friendly design, QR code access, and tools for tracking user access and download statistics. The study shows that digital technology, when combined with community participation, can support the documentation, preservation, and promotion of intangible cultural heritage while encouraging greater public engagement with local cultural resources.

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Introduction

Dusit District is one of the 50 administrative districts of Bangkok, Thailand. The area is characterized by a mix of commercial zones, densely populated residential communities, military establishments, and significant historical and cultural landmarks. It is also home to Thailand's Parliament, several ministries, and royal palaces, reinforcing its role as a central administrative and political hub of the nation. The district is subdivided into five subdistricts: Dusit, Vachiraphayaban, Suan Chitlada, Si Yaek Mahanak, and Thanon Nakhon Chai Si. Dusit District holds a wealth of historically and culturally significant sites, many of which are closely tied to the 240-year history of Rattanakosin, the historic center of Bangkok. Notable landmarks include Dusit Palace, Sukhothai Palace, Suan Kularb Palace, Suan Sunandha Palace, and several prominent temples such as Wat Benchamabophit Dusitwanaram, Wat Ratchathiwat, Wat Noi Nopakhun, Wat Thewaratchakunchorn Worawihan, and Wat Ratchaphatikaram Worawihan (Dusit District Office, 2024). These sites embody the district's intangible cultural heritage, reflecting living traditions, ceremonies, community customs, and collective memory that form the cultural identity of Bangkok.

Recognizing the importance of preserving and promoting this heritage, particularly in areas where multicultural communities coexist, the research team selected Vachiraphayaban Subdistrict as the focus of this study. This subdistrict is notable for its longstanding ethnic and cultural diversity, historically inhabited by Portuguese, Christian Khmer, Chinese, and Yuan (Annamese) communities who have lived together harmoniously over generations. In addition, the Samsen Pier area within the subdistrict has historical significance as a key commercial hub, particularly for the transport of construction materials such as sand.

To support sustainable community development and ensure that cultural and historical resources benefit local communities, it is critical to understand the current conditions, challenges, and needs of stakeholders. Modern approaches to managing and preserving intangible cultural heritage increasingly rely on digital technologies. Therefore, this research project aims to establish a digital data repository platform for the intangible cultural heritage of Vachiraphayaban Subdistrict. This initiative seeks not only to document and preserve local heritage but also to promote community awareness and participation in cultural

conservation efforts. The Dusit District Office, as the primary stakeholder and end-user, will utilize the research findings to guide future cultural policy and community engagement.

A review of existing digital cultural heritage repositories in Thailand reveals several limitations, including inadequate visitor tracking tools, poor user interface design, limited support services, and insufficient search functionalities. Compared to international standards, Thai digital data repository lacks key features such as multilingual support, interactive content, data sharing capabilities, user guidance, and comprehensive policy disclosures. Broader challenges include unclear project objectives, lack of skilled personnel, limited funding, insufficient government policy support, and weak inter-agency collaboration (Chirakitnimit & Laoakka, 2020).

Objective

To investigate the intangible cultural heritage and traditional knowledge of the Vachiraphayaban Subdistrict, Dusit District, Bangkok, and to develop a digital database platform through active community participation.

Conceptual Framework

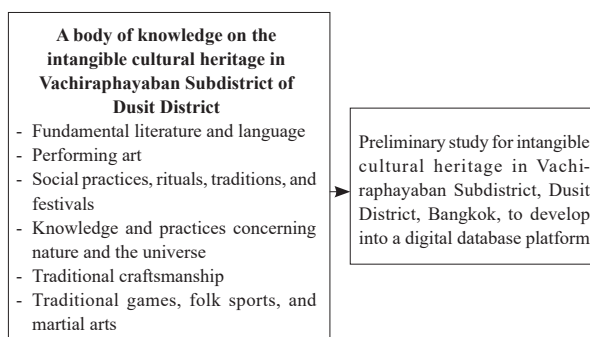


Figure 1 Conceptual Framework

Research Methodology

Spatial Scope

This research focuses on the Vachiraphayaban Subdistrict in Dusit District, Bangkok, selected through purposive sampling due to its rich multicultural heritage and historical significance. The subdistrict's diverse population and longstanding cultural traditions make it a suitable case study for the documentation and preservation of intangible cultural heritage.

Target Group and Participant Selection

The study aims to engage a diverse group of stakeholders involved in the management, preservation, exhibition, and utilization of cultural heritage within Dusit District. Participants are selected using purposive sampling, in collaboration with the Community Development and Social Welfare Division of the Dusit District Office. The target group includes approximately 12 individuals, representing a cross-section of relevant stakeholders: One local stakeholder, One individual responsible for cultural heritage data management, One person overseeing data collection and preservation, One individual responsible for data exhibition, One individual utilizing cultural heritage data, One government official, One academic expert, One executive, One local wisdom scholar, One entrepreneur, One representative from a government agency, One representative from a private organization involved in cultural heritage activities. In addition, 17 key informants comprised of experts, academics, and researchers with specialized knowledge of the heritage of Vachiraphayaban Subdistrict, were selected to participate in focus group discussions.

Research Instruments

1. In-depth Interview Guide

A semi-structured interview guide was developed to explore various domains of intangible cultural heritage in the Vachiraphayaban Subdistrict, including folklore and language, performing arts, social practices, rituals, traditional festivals, ecological knowledge, traditional craftsmanship, folk sports, and martial arts. The interview guide incorporates questions related to past activities, current conditions, existing challenges, and future aspirations.

The guide was constructed based on insights from literature reviews and field observations. It was subsequently reviewed by three subject-matter experts to assess its content and structural validity. The Index of Item-Objective Congruence (IOC) was calculated using the Rovinelli and Hambleton (1977) method, with items scoring above 0.50 retained. The revised questions were pilot-tested with 30 individuals outside the target sample.

The reliability of the instrument was determined using Cronbach's Alpha, with a threshold of ≥ 0.75 considered acceptable (Prawalpruk & Wijitwattana, 2012). The final version of the instrument achieved a reliability coefficient of 0.91, indicating high internal consistency.

2. Focus Group Discussion Recording Form

This instrument is designed to document

key points from focus group discussions using the AIC (Appreciation, Influence, Control) method. The form supports thematic analysis of content related to heritage development and the compilation of material for a multilingual e-book (Thai, English, Chinese, and Japanese).

Questions for the form were developed from field data and literature and assessed for content validity by three experts. Using the IOC method, only questions with scores above 0.50 were retained. The instrument was pilot-tested with 30 non-sample individuals and evaluated for reliability, achieving a final Cronbach's Alpha score of 0.87, confirming high reliability.

Data Collection

Data collection was conducted over a three-month period, from March to May 2024. In-depth interviews and focus group discussions were carried out directly by the research team. The process involved the following steps:

1. Coordination with the Community Development and Social Welfare Office of Dusit District to obtain a list of community leaders.
2. Contacting Vachiraphayaban community leaders to identify knowledgeable individuals for interviews.
3. Interviewing local scholars nominated by the community to gather detailed insights into cultural heritage practices.
4. Organizing focus group discussions with 17 key informants, whose roles span the full spectrum of cultural heritage activities including data management, preservation, exhibition, and application.

Data Analysis

1. In-depth Interview Data

Responses from in-depth interviews were analyzed using content analysis. To ensure credibility and consistency, the triangulation method and analytic induction were applied to validate findings across sources and contexts.

2. Focus Group Data

Data from the focus group discussions were interpreted using thematic content analysis, following Srisaard's (2017) analytical framework. Responses were grouped by question, summarized, and synthesized into actionable insights.

3. Validation of Cultural Heritage Records

The accuracy and consistency of the documented intangible cultural heritage were verified through cross-comparison of interview data, field observations,

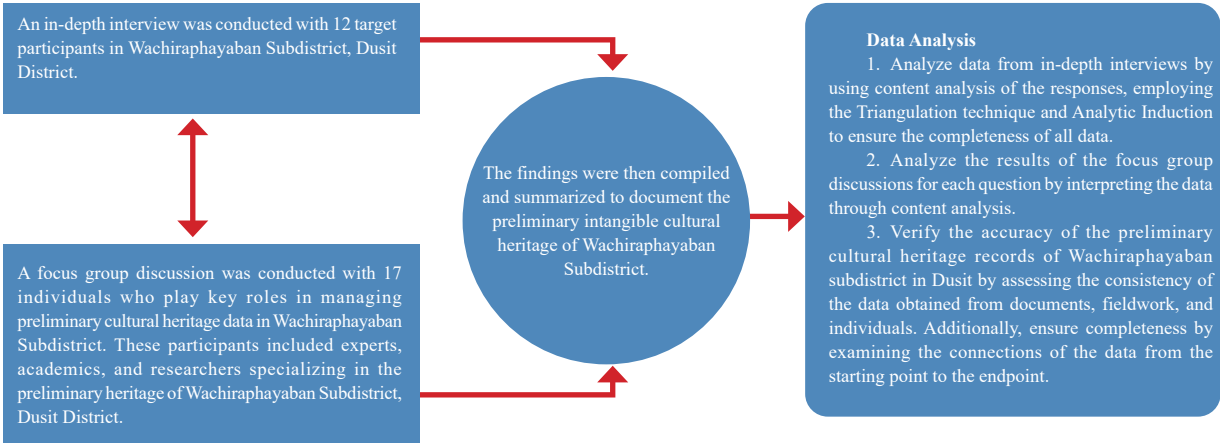


Figure 2 Research Process from Data Collection to Data Analysis

and archival materials. A thorough examination of the data’s coherence—from its origin to final synthesis—ensured the completeness and validity of the cultural heritage profile for the subdistrict.

Results

The results of this research are as follows:

1. A total of 11 preliminary intangible cultural heritage items in Vachiraphayaban Subdistrict, Dusit District, Bangkok was identified in both tangible and intangible cultural heritage, categorized as follows:

1.1 Social Practices, Rituals, Traditions, and Festivals which are Merit-Making for Wandering Spirits

(Ting Krachat Festival), Sart-Thai Festival (Tenth Lunar Month Festival). Temples associated with cultural heritage: Thewarat Kunchorn Worawihan Temple, Prasat Boonyawat Temple, Rajapathikaram Worawihan Temple, and Rachathiwat Ratchaworawihan Temple.

1.2 Knowledge and Practices Related to Nature and the Universe which are Nam Chiang Iced Coffee (O-Liang Nam Chiang), Hainanese Rice Vermicelli (Khanom Jeen Hailam), Royal Thai Cuisine Buffet, and Traditional Thai Kong Dessert (Khanom Kong)

1.3 Traditional Handicraft which is Fruit Carving

Table 1 The Preliminary Cultural Heritage Records in Vachiraphayaban Subdistrict, Dusit District, Bangkok

Preliminary Cultural Heritage Records in Vachiraphayaban Subdistrict, Dusit, Bangkok		Details of the Information
1. Merit-Making for Wandering Spirits or Ting Krachat Festival (Goddess Thapthim Shrine) 		Distinctive Characteristics The Ting Krachat Festival is a merit-making tradition dedicated to wandering spirits, combined with charitable giving to the underprivileged. It embodies both “merit-making and generosity,” bringing joy to both the giver and the receiver. This event reflects a blend of Buddhist and Chinese beliefs in its practices.
		Cultural Significance The Ting Krachat Festival is a longstanding tradition of the Hainanese Chinese people in Wat Ratchapha Thapthim Ruamjai Community, Dusit District. It has been passed down through generations and continues to be arranged annually. The festival is a community-driven event, with local residents participating actively. The community committee and the staff of the Samsen Tuptim Shrine play a key role in organizing and managing the event.

Table 1 The Preliminary Cultural Heritage Records in Vachiraphayaban Subdistrict, Dusit District, Bangkok (Cont.)

Preliminary Cultural Heritage Records in Vachiraphayaban Subdistrict, Dusit, Bangkok	Details of the Information
2. The Tenth Lunar Month Festival or Sart-Thai Festival (Ratchathiwat Ratchaworawihan Temple)	Distinctive Characteristics The Sart-Thai Festival Merit-Making Ceremony, locally known as “Ching Pret Day”, is observed in the tenth lunar month (usually in September) on the fifteenth waning moon day. According to the beliefs of Southern Thai Buddhists, this is the day when the ancestral spirits, who returned to visit their descendants, must depart for the afterlife. The primary purpose of the ceremony is to dedicate merit to the ancestral spirits. Cultural Significance The community is home to a large number of Southern Thai Buddhists who organize the Sart-Thai Festival merit-making ceremony annually at the sermon hall in a monastery of Wat Rachathiwat Wihan. The event includes Dharma preaching, merit-making for ancestors, offering food to monks and novices, and the traditional Ching Pret ritual, which symbolizes offering merit to the wandering spirits, nizing and managing the event. (Wat Rajadhipasvihara, 2025)
	Distinctive Characteristics Nam Chiang O-Liang (traditional Thai iced coffee) shop roasts its own coffee beans using firewood, giving it a more aromatic scent than other shops. The coffee is made without preservatives, and the beans are purchased in large sacks (each weighing 60 kg). In the past, the coffee beans were sourced from Southern Thailand, but nowadays, they are also imported from Vietnam, which provides beans with a richer aroma and better flavor. Cultural Significance In the past, Nam Chiang O-Liang served as a community coffeehouse, a gathering place for locals and travelers using the waterways. However, the community has changed significantly over time. Today, the shop has been passed down from the parents' generation to their children and now operates in a more limited capacity—selling only to long-time customers or acquaintances. Instead of serving coffee on-site, it is sold in bags or large bottles (1.5 liters) for resale. The decline in foot traffic, combined with the fact that the area is no longer a major waterway route, has led to this shift in business operations. Nonetheless, Nam Chiang O-Liang remains a cultural identity of the community, known for its distinct taste and unique aroma.
	Distinctive Characteristics “Hainanese Rice Noodles” originates from Hainan Province in southern China. The noodles are made from rice flour mixed with tapioca flour, giving them a chewier and more elastic texture than traditional Thai rice noodles. They are also thicker in size. Traditionally, the dish is served with both braised and fresh beef, but over time, it has been adapted to include braised pork and pork tendon to cater to customers who do not eat beef. A key distinctive feature that sets it apart from other Chinese dishes is the use of Hainanese shrimp paste, which has a unique flavor different from regular shrimp paste. Cultural Significance The Hainanese Rice Noodles from Goddess Tubtim Shrine at Samsen Pier (near Krung Thonburi Bridge), is a cultural heritage passed down from generations of Chinese immigrants in Thailand. Originally, they sold it alongside Chinese opera troupes that performed at various shrines, including Goddess Tubtim Shrine at Samsen Pier. However, as the Chinese opera performances at shrines have become less common, the vendor established a permanent food stall at the shrine. This legacy has continued for over 50 years, preserving a unique piece of Hainanese culinary heritage in Thailand.
	

Table 1 The Preliminary Cultural Heritage Records in Vachiraphayaban Subdistrict, Dusit District, Bangkok (Cont.)

Preliminary Cultural Heritage Records in Vachiraphayaban Subdistrict, Dusit, Bangkok		Details of the Information
5. Royal Cuisine Buffet, Devaraj Kunchorn Worawihan Temple Community	 	Distinctive Characteristics The Royal Cuisine Buffet from the community of Wat Devaraj Kunchorn is a traditional royal cuisine recipe that has been around for over 80 years. The highlight of royal cuisine is its delicate and harmonious flavors, offering a balance of all tastes without any single flavor standing out. It is meant to have a moderate flavor profile, avoiding overly strong or spicy tastes. The presentation is exquisite, using finely crafted utensils, such as traditional toke (a large wooden tray) for serving food to monks. Cultural Significance The Devaraj Kunchorn Worawihan Temple Community is located along the Chao Phraya River and Khlong Padung Krung Kasem, an ancient community that dates back to the reign of King Rama IV. This area was granted as land for royal use to house noble families and royal servants. The community is a pioneer in Bangkok hosting royal cuisine buffet events, preserving this culinary tradition.
6. Khanom Kong (or Khanom Kong Kwian)		Distinctive Characteristics Khanom Kong (or Khanom Kong Kwian) is an ancient Thai dessert and a traditional snack from the central region. It is shaped in a circular form with a crossbar, resembling a wheel, symbolizing a prosperous life. This dessert is commonly used at weddings as a symbol of the couple's lifelong happiness and love, much like the turning wheel moving forward. Cultural Significance Khanom Kong of the Devaraj Kunchorn Worawihan Temple Community does not contain toasted rice but instead uses soybeans or mung beans as the main ingredient. It is about the size of a ten-baht coin and is a cultural product passed down from the royal court traditions of the past. (Khanom Kong Talat Ban Mai 100 Pi, 2021)
7. Fruits and Vegetables Carving by Mr. Nobsarot Kettat (Ratchathiwat Temple Community)	 	Distinctive Characteristics The fruit and vegetable carving in the Ratchathiwat Temple Community stands out for its craftsmanship and meticulousness in creating beautiful pieces. This art is commonly used for garnishing Thai savory and sweet dishes, as well as in royal ceremonies. Its special feature lies in the delicate skills involved, including peeling, carving, scraping, and scooping, all of which must be done quickly and with precision to preserve the freshness of the materials. Khun Nobsarot Ketutat is widely recognized for his beautiful carvings. Cultural Significance This fruit and vegetable carving is graceful and elegant, reflecting the skill and expertise of Thai artisans. It not only showcases beauty and uniqueness but also carries deep spiritual value and heritage, passed down through generations. Starting from the grandmother of Khun Phat, a royal court artisan during the reign of King Rama V, has continued to excel in this field, including banana leaf work, and flower arranging.

Table 1 The Preliminary Cultural Heritage Records in Vachiraphayaban Subdistrict, Dusit District, Bangkok (Cont.)

Preliminary Cultural Heritage Records in Vachiraphayaban Subdistrict, Dusit, Bangkok	Details of the Information
8. Crowning Ceremony for Auspiciousness, Devaraj Kunchorn Worawihan Temple	Distinctive Characteristics Devaraj Kunchorn Worawihan temple is a third-class royal temple of the Worawihan type, located in the Dusit District of Bangkok, along the Phadung Krung Kasem Canal and the Chao Phraya River. It was originally established during the Ayutthaya period and is an ancient temple. It was later reestablished by King Rama I, the first monarch of the Chakri Dynasty. Cultural Significance A prominent activity is the “Crowning Ceremony for Auspiciousness.” The ceremony is conducted by monks who recite auspicious chants. Then, a ceremonial throne containing relics of the Buddha, which have been brought from Sri Lanka, India, and Myanmar, is placed on the heads of both men and women. During the ceremony, participants are encouraged to make a wish or prayer. The ceremony concludes once this is completed.
	Distinctive Characteristics Wat Prasat Boonyawat is a Buddhist temple under the Maha Nikaya sect, located near Sukhothai Palace. A notable feature of this temple is its Ubosot (ordination hall), which houses murals depicting traditional Thai ways of life, such as cockfighting and kite flying. In front of the temple, there is a large golden statue of Luangphor Toh, seated in the lotus position (Padmasana), painted in gold. Cultural Significance After a fire in 1955, the abbot of Wat Chang received a vision of Luangphor Toh, instructing him to help restore the temple. Following this vision, a mold and ingredients for creating Luangphor Toh amulets were given, marking the beginning of the production of these widely revered amulets. They have remained highly popular to this day. (Wat Prasat Boonyawat, 2023)
10. Wat Ratchaphatikaram Worawihan	Distinctive Characteristics Wat Ratchaphatikaram Worawihan is a third-class royal temple, originally named Wat Somkhang, an ancient temple. A notable feature of the temple is its Ubosot (ordination hall), which combines Chinese and Vietnamese architectural styles. The gable is decorated with plasterwork adorned with Chinese porcelain dishes, unlike other Ubosots built or renovated during the reigns of Kings Rama III and Rama IV, which typically featured chofah (gable ornaments). Inside the Ubosot, the Phra Phuttha Suk (the principal Buddha image) is in the Chiang Saen style, crafted from triple alloy bronze. Cultural Significance Wat Ratchaphatikaram Worawihan is a third-class royal temple that has received restoration assistance from three monarchs. In 1973, the temple's Ubosot underwent restoration, and the royal remains of King Rama IV and King Rama V were enshrined behind the Ubosot, underscoring the temple's historical and cultural importance. (Dhammathai, 2026)
	

Table 1 The Preliminary Cultural Heritage Records in Vachiraphayaban Subdistrict, Dusit District, Bangkok (Cont.)

Preliminary Cultural Heritage Records in Vachiraphayaban Subdistrict, Dusit, Bangkok		Details of the Information
11. Wat Ratchathiwat Worawihan		Distinctive Characteristics Wat Ratchathiwat Worawihan, formerly known as Wat Somorai, is an ancient temple dating back to the Ayutthaya period. The current structure mainly reflects the architectural work from the Rama V era. King Rama V graciously appointed Somdet Chao Fah Krung Phra Naritharanuwat Wong to design the Ubosot, the Galit Wall, and the Naga Bridge in front of the Ubosot. This temple is distinct from others due to its unique design, which blends Thai, Khmer, and Western architectural styles seamlessly, making it one of the most renowned and well-known masterpieces of its kind. Cultural Significance Inside the Ubosot, there are wall murals depicting the Vessantara Jataka in all 13 sections. Somdet Chao Fah Krung Phra Naritharanuwat Wong provided the designs, and the Italian artist Carlo Rigoli was commissioned to expand the designs and paint them using the fresco technique, a method of painting on wet plaster, which is a Western painting style. (Nukkipid, 2023)

2. The approach to developing a digital data repository platform is as follows:

Creating an e-book from the preliminary list of 11 intangible cultural heritage in Vachiraphayaban Subdistrict should include voice narration and video clips, as well as a visual impairment program or PPA Tatip program, with links accessible via QR codes. Additionally, it should incorporate guidelines on best practices and precautions concerning the community’s privacy. The target audience includes youth, community members, and tourists. It’s important to avoid overly large file sizes, opting instead for short, easy-to-understand clips. The content should be accessible via mobile phones and iPads, and it should track statistics on the number of accesses and downloads. It is crucial to consider the target audience, such as tourists and tour guides, to ensure that the information is easily accessible. Tourists and the general public should be able to find details on how to travel to the destination, what are the significant attractions, and who are the local keepers of wisdom. However, for academics or students, more in-depth content may be required, such as architecture and history. Additionally, details on the preservation of the preliminary cultural heritage items in the area should be included, with location coordinates. The content should be created as PDF files to keep the file size manageable. Additionally, coordination with the Head of Community Development and Social Welfare at the Dusit District Office should be established to ensure that the platform’s content is continuously updated and remains current.

Discussion and Conclusion

This research addresses the following discussion points:

Preliminary Study Guidelines for Intangible Cultural Heritage in the Vachiraphayaban Subdistrict, Dusit District, Bangkok, to Develop a Digital Database Platform.

The preliminary intangible cultural heritage records in Vachiraphayaban Subdistrict, Dusit District, Bangkok, consist of 11 items including (1) Merit-Making for Wandering Spirits or Ting Krachat Festival (Goddess Thapthim Shrine), (2) The Ten-month Festival or Sat-Thai Festival (Ratchathiwat Ratchaworawihan Temple), (3) Oliang Nam Chiang or Nam Chiang Thai iced coffee (Samsen Pier), (4) Hainanese Rice Noodles or Hainanese noodles (Goddess Thapthim Shrine), (5) Royal Cuisine Buffet, Devaraj Kunchorn Worawihan Temple Community, (6) Khanom Kong (or Khanom Kong Kawian), (7) Fruit Carving by Mr. Nobsarot Kettat (Ratchathiwat Temple Community), and (8) Crowning Ceremony for Auspiciousness, Devaraj Kunchorn Worawihan Temple (9) Wat Prasat Boonyawat (10) Wat Ratchapathikaram Worawihan (11) Wat Ratchathiwat. This aligns with the research conducted by Chirakitnimit and Laoakka (2021), who studied the development of a digital cultural heritage database in Lamphun Province to promote the creative economy. Their findings revealed that cultural heritage information in Lamphun Province was collected from museums, historical sites, temples, schools, and private exhibition spaces. This is also consistent with the research by Thali (2022), who conducted a study on the conservation and development of a cultural database for the Old Market Community in Ang Sila, Chonburi Province. The study found that the factors influencing the composition and characteristics of the cultural database reflected the culture of the Old

Market Community in Ang Sila and consisted of three components: 1) the knowledge base of the community's wisdom, 2) the knowledge management process, and 3) the storage and dissemination process. These factors were developed into a model for creating a cultural database that impacted cultural learning and the cultural database system. This model was then used to design the cultural database for the Old Market Community in Ang Sila, Chonburi Province, that has an impact on cultural learning.

This also aligns with the research findings of Skublewska-Paszkowska et al. (2022). Their study, titled *"3D technologies for intangible cultural heritage preservation—literature review for selected databases,"* found that preserving cultural heritage is crucial for contemporary life. It helps humanity learn about their ancestors and way of life. The rapid development of 3D technology has significantly contributed to documenting both tangible and intangible aspects of cultural heritage, offering a vivid reflection of lifestyles. This technology enables the preservation of historical elements for future generations through the documentation, discovery, and presentation of cultural traditions. Whether in the form of performances, craftsmanship, or oral histories passed down through generations, 3D technology ensures these traditions are effectively maintained and communicated.

Creating an e-book from the preliminary list of 11 intangible cultural heritage in the Vachiraphayaban Subdistrict should include voice narration and video clips, as well as a visual impairment program or PPA Tatip program, with links accessible via QR codes. Additionally, it should incorporate guidelines on best practices and precautions concerning the community's privacy. The target audience includes youth, community members, and tourists. It's important to avoid overly large file sizes, opting instead for short, easy-to-understand clips. The content should be accessible via mobile phones and iPads, and it should track statistics on the number of accesses and downloads. It is crucial to consider the target group. This aligns with the research conducted by Tubtim et al. (2022) on the development of a personal digital archive for Professor Silpa Bhirasri. The study identified and analyzed two key areas of needs which were: 1) the system, which included hardware, software, and data, and 2) the users, which involved screen design, information retrieval, search result display, usability, and practical application. It also aligns with the research conducted by Karapan and Porpalee (2022) on the development of a community database for Ban Huai Pu

Kaeng, Tambon Phabong, Mueang District, Mae Hong Son Province. The study found that:

1) The community of Ban Huai Pu Kaeng is home to refugees fleeing from the war in Myanmar since 1984–1985 until the year 2020. Significant events have been chronologically ordered and organized into a historical timeline for the community. This helps the community understand their story, observe the development and historical progression, and see the changes that have occurred from the past to the present in Ban Huai Pu Kaeng.

2) A community map, community calendar, and cultural identity information for the ethnic groups, including Kayin, Kayan, Kayah, Pga K'nyau, and Tai Yai, were created. This information was organized for digital archiving in the database system of the Sirindhorn Anthropology Center (Public Organization) and disseminated through social media. This aligns with the research of Lii et al. (2022) on "Research on Digital Platform Technology of Intangible Cultural Heritage in Beijing Section of Great Wall Cultural Belt." Their study found that digital platforms should be developed to protect intangible cultural heritage, particularly regarding the planning and protection of the Beijing section of the Great Wall Cultural Belt. The establishment of a database and the creation of a digital platform are crucial for protecting, preserving, developing, and promoting cultural heritage.

This current research explores the development and design of various application platforms for digital channels related to local cultural characteristics. This includes gathering information, surveying data for tourism, appreciating art and craftsmanship, learning, and engaging with experiences related to intangible cultural heritage. This is consistent with the research by Alivizatou (2021), which examined "Digital Intangible Heritage: Inventories, Virtual Learning, and Participation." The study found that current information technology methods are used to preserve documents and learn about cultural heritage. The concepts of preserving data repositories through digital cultural storage and exploring methods for documenting and learning through virtual means and online participation were investigated. The study also explored how digital technology facilitates the connection between communities and intangible heritage. This research emphasizes the use of the i-Treasures web platform, which contributes to the digital identification of intangible heritage, including preservation processes and participation.

A Digital Repository refers to a system or platform that collects, stores, and disseminates digital information. These systems are commonly used by museums, archives, and academic institutions to preserve data for long-term accessibility. Digital platforms play a crucial role in cultural heritage conservation beyond simply raising awareness. Various integrated approaches can be employed, such as:

- **Digitization and Data Preservation:** The platform can function as a repository for images, historical documents, and audio recordings of art, culture, or traditions that may otherwise be lost in the future.

- **Interactive Learning and Engagement:** Digital platforms can enhance user interaction and provide immersive learning experiences, allowing for a more engaging understanding of cultural heritage.

- **Support for Artisans and Cultural Experts:** These platforms can serve as a channel for artisans and cultural specialists to share their knowledge, offer training courses, or sell traditional products, ensuring that arts and crafts continue to thrive through practical application.

- **Collaboration and Funding for Conservation Efforts:** Digital platforms can act as a bridge between museums, universities, and cultural organizations, fostering long-term conservation projects. They can also support fundraising efforts for heritage restoration, knowledge transmission, and cultural events.

By integrating these functions, digital platforms can significantly contribute to the preservation and promotion of cultural heritage in a sustainable and accessible manner.

Digital platforms play a crucial role in promoting cultural tourism. Technology enables people to explore cultural sites through digital platforms, sparking interest and motivating travel. These platforms also support community-based tourism by providing a space for engagement. Communities can actively participate by contributing information, recording stories, or uploading media about their cultural heritage into a digital archive. This fosters knowledge exchange, preserves local wisdom, and creates networks of collaboration between experts and researchers. Additionally, digital platforms can stimulate local economies by supporting the sale of traditional and artistic products. Beyond being educational tools, digital platforms serve as key instruments for preserving cultural heritage, boosting tourism, and enhancing community participation. With proper design and implementation, these platforms can

ensure the sustainable transmission of cultural heritage while benefiting local economies and education.

The research findings revealed that the approach to studying the preliminary list of cultural heritage in Vachiraphayaban Subdistrict, Dusit District, Bangkok, for the development of a digital data repository platform involves creating an electronic book from the initial list of 11 cultural heritage items. This should include adding narrated audio descriptions and video clips. Additionally, the platform should include accessibility features such as a visual impairment program, links using QR codes, and information on practices or precautions regarding community privacy. The target audience includes youth, community members, and tourists. The platform should focus on avoiding excessively large files by providing short, easily understandable clips that are accessible via mobile phones and iPads. It should also include a system for tracking statistics related to access to the preliminary cultural heritage data. Raising awareness about the conservation of intangible cultural heritage is crucial today. It helps people learn about cultural ancestors and way of life. The rapid development of 3D technology has significantly contributed to documenting both tangible and intangible aspects of cultural heritage, offering a vivid reflection of lifestyles. This technology enables the preservation of historical elements for future generations through the documentation, discovery, and presentation of cultural traditions. Whether in the form of performances, craftsmanship, or oral histories passed down through generations, 3D technology ensures these traditions are effectively maintained and communicated.

Therefore, the conservation of intangible cultural heritage is of significant importance today.

The platform's content, which is the preliminary list of 11 intangible cultural heritage in Vachiraphayaban subdistrict, is derived from discussion with the target participants in the community. They will be continuously updated and remain current by the designated staff of the Community Development and Social Welfare Department at the Dusit District Office.

However, this study found that while digital technology plays a beneficial role in the dissemination and preservation of intangible cultural heritage, it is crucial to consider its societal impacts. Some key concerns include:

- Lack of community participation, which may result in a disconnect between heritage preservation efforts and local engagement.
- Loss of irreplaceable cultural values, particularly

in oral traditions such as performing arts and folk music, which may not be fully captured in digital formats.

- Reduced connection to real-life experiences, as digital representation cannot always substitute the authenticity of direct cultural engagement.

- Risk of knowledge loss, as many key informants are elderly, and some have retired from their professions, leading to a lack of cultural transmission.

- Disappearance of certain intangible cultural heritage from Dusit District, as some traditions and practices have no successors, for instance, the discontinuation of beef congee (Joke Neua).

- Risk of commercialization, where cultural heritage is turned into a marketable commodity without regard for its true cultural meaning and value.

Suggestions

1. This study guideline of intangible heritage items in Vachiraphayaban Subdistrict, Dusit District, Bangkok, aims to develop a digital database platform. The focus is on developing an initial inventory of items in Vachiraphayaban Subdistrict, Dusit District, Bangkok for consideration as intangible heritage by the relevant committees.

2. Further research should be conducted on intangible heritage items in other areas of Bangkok that have not yet been formally recognized because actually Bangkok is a province with rich history spanning over 200 years of the Rattanakosin period.

3. Intangible heritage items that have been approved should be developed into a digital database platform so the next generation and others who are interested have wider access in the digital age.

4. Future research directions should be expanded, such as utilizing AI (Artificial Intelligence) to develop platforms for cultural heritage study. This could help create more immersive and interactive learning experiences.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

During the preparation of this manuscript, the author used ChatGPT for enhancing the language clarity and on improving the grammar. The final content was reviewed and edited by the author, who will take full responsibility for the accuracy and integrity of the publication.

Conflict of interests

The authors declare no conflict of interests.

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