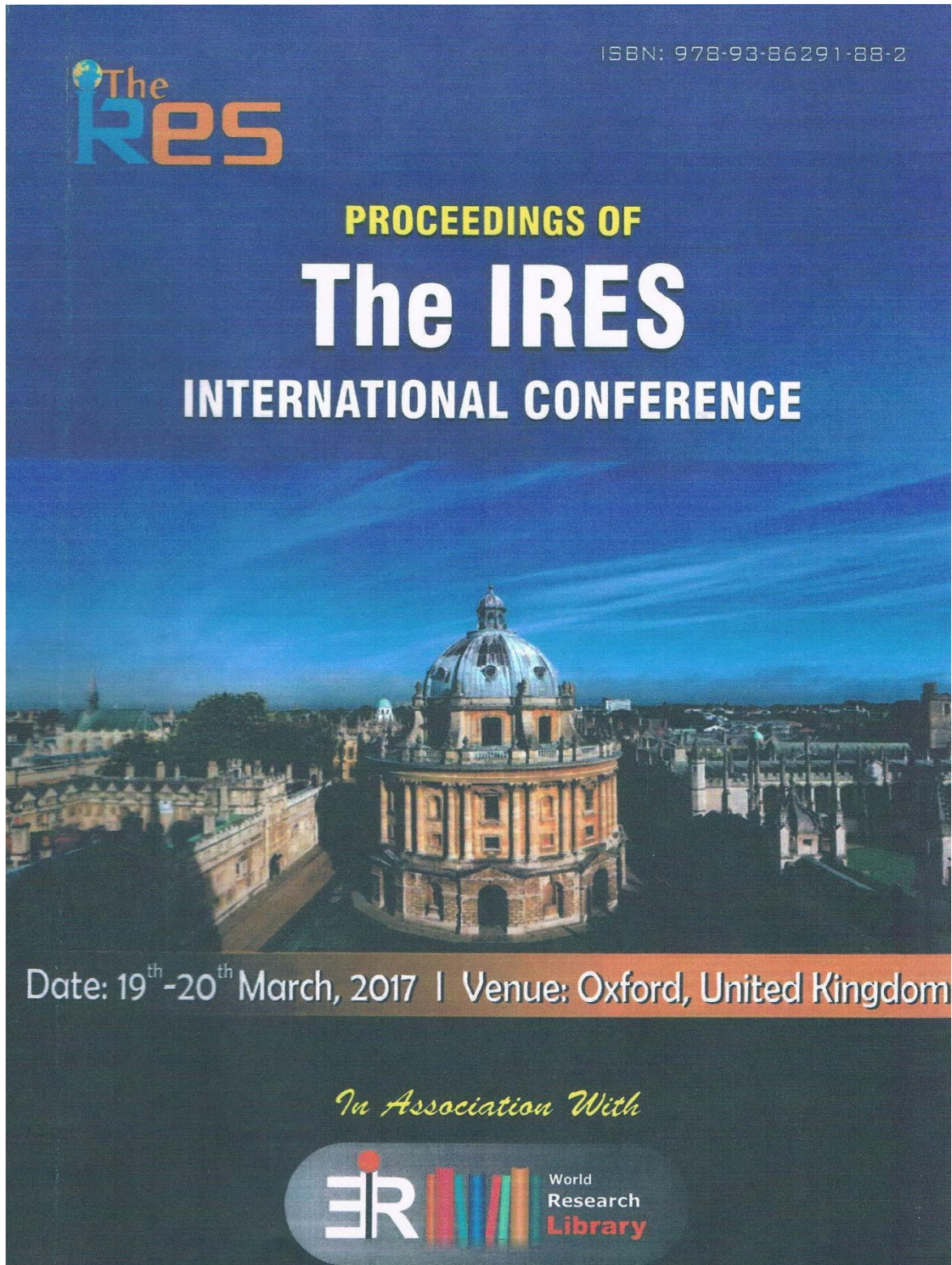


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GEOGRAPHIC INFORMATION TOURISM SYSTEM WITH COMMUNITY PARTICIPATION IN TALING – CHAN DISTRICT, BANGKOK

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Abstract—Taling-Chan district is one area of Bangkok. Taling-cha district has community connect with the canal, so that create a riverfront lifestyle especially waterfront tourism in Bangkok. The geographic Information system will help the Taling-cha council to support waterfront tourism. The objective of this research is creating the GIS data to support the participation of the community of riverfront tourism. Collecting the data is consisting of collecting data for GIS and data for sight-seeing. For sightseeing, support consists of imagining of the city, attractive point survey, travel survey and viewpoint survey. For GIS data, must model the GIS database before creating a database. In this research use the diagram for model the GIS database.

Index Terms— Geographic Information System, Tourism, Taling-Chan District, Bangkok.

I. INTRODUCTION

Participation is a key element among the criteria of 'good governance' for effective participatory spatial planning. Governance is a set of measures of the relationships between the 'governed' (civil society and the public) and the 'governing' (the government, its institutions, and private sector interests). The pertinent power relationships are those involving policy setting, decision-making, planning, and implementation. Participatory GIS (PGIS) is described as the 'integration of local knowledge and stakeholder or expert perspective in the GIS'. Participation in PGIS can be characterized both into types and intensities.[2]-[6]

Manipulative and passive participation involving information flows between local people and 'outsiders,' regarding primarily technical information, such as resource assessment, e.g. participatory mapping in many rapid rural appraisal exercises.

Consultation or functional participation – outsiders refer selected, focused issues to local stakeholders, and interpret their responses into 'scientific' frameworks, such as maps of 'needs.'

Interactive involvement in decision-making by all actors in most stages – participation seen as a right, not just as the means to achieve outsiders' project goals.'

Initiating actions – independent initiatives from, and 'owned' by, local people; or self-mobilization. This is a strong indicator of empowerment.

UNESCO has been supporting the development of modern computer-based tools in cultural resource management and has tested and proven that GIS is a powerful tool to aid in cultural resource management. The UNESCO manual "GIS and Cultural Resource Management developed with the assistance of the

Government of the Republic of Korea (for Asia and the Pacific), states that "UNESCO consciously chose to test the usefulness of computer-aided GIS in the difficult situation...where map data was non-existent, electricity rare and where no local manager had even heard of GIS...". From this testing, the UNESCO concluded-"GIS is very usefulness..." They further affirmed-"GIS is a proven tool which should be made available to all site managers everywhere in the world." It is obvious then that the power of GIS in cultural heritage tourism and resource management cannot be overstated.

According to the United States' National Trust for Historic Preservation's (NTHP) Heritage Tourism Program (HTP), between 1990 and 1993 the NTHP's HTP coordinated a "Heritage Tourism Initiative" in sixteen pilot areas in four US States (Indiana, Tennessee, Texas, and Wisconsin). The aim of the preliminary was to "why it is successful and sustainable." The results from the initiative were used to develop the NTHP's five basic guiding principles[1] There are five principles: collaborate, find the fit, make sites and programs come alive, focus on quality and authenticity and preserve and protect.

Taling-Chan is one of the districts in Bangkok. It is the only district that houses that most floating markets which include Taling-Chan Floating Market, Khlong Mayom Floating Market, Wat Saphan Floating Market, Wat Jampa Floating Market, and Wat Taling-Chan Floating Market. They are all connected by water. C tourism in Taling-Chan District is important in boosting Tourism in Bangkok. Because Taling -Chan District has many small and large-sized canals such as Bangkok Noi Canal, Bangkok Yai Canal, Maha Sawad Canal, Bang Ramard Canal, Bang Phrom Canal, Bang Noi Canal, and Bang ChuekNang

Canal, this traditional area is still using canals and rivers as methods of transportation.

This paper takes a spatial approach to investigating Taling-Chan cultural heritage by leveraging PGIS capabilities to map the major cultural heritage sites in the district

II. LITERATURE AND THEORY

The Five Principles

Collaboration the NTHP's perspective that success in collaboration efforts will depend on the active participation of all stakeholders – political leaders, businesss, operators of tourist sites, arts and craft vendors, accommodation operators, etc..

Find the fit (between the community and tourism) This area deals with finding the right kind of tourism for the location that fit the needs of the community and the environment and thus measures the capabilities of the community resources against the community's views on tourism. The NTHP notes that local priorities and capabilities vary and consequently determines what needs to be done and can be done, for heritage tourism.

Criteria for finding the fit Finding the fit is a three-fold approach: Feedback is solicited from residents about the interest in developing a cultural heritage tourism. Residents solicited to become involved in the process– serve on committees, volunteer as tour guides, participate in hospitality training, sponsor special events and other ways that contribute to the program. Residents concerns are followed up on, and there should be a developed plan for responding to concerns.

Make sites and programs come alive This area deals with what the area must offer, and the overall visitor experience. Creative strategies for creating an interactive and engaging experience for the visitors are important while interpreting the site information correctly.

The NTHP recommends finding ways to engage the visitors five senses, as the more visitors are involved, the more they will retain. According to the NTHP, on average, visitors will remember: 10% of what they HEAR 30% of what they READ 50% of what they SEE 90% of what they DO

Criteria for Making sites come alive: Printed materials with authentic information (brochures, maps, signs, etc.) Interactive sessions with visitors (questions, hands-on activities, etc.) Events or activities in collaboration with other sites. Activities relate to the story of the site Focus on quality and authenticity. This is what will distinguish one area from another and will represent the true authentic contributions made by past generations to the area that will entice and appeal

to visitors.

Preserve and protect This speaks to the preservation and protection of heritage sites and traditions. The NTHP strongly believes that protecting the traditions and sites of an area greatly enhances the appeal to visitors seeking this type of experience. This study focus on collaborative, find the fit and make sites and program come alive for the resident process in Taling-Chan district, Bangkok.

III. DETAILS EXPERIMENTAL

From the objectives, the following research methodologies were utilized

First, Literature review and background information on tourism and GIS How they interact Second, sourcing secondary data from various agencies. Then, using a participatory GIS (PGIS) technique to collect and classify the primary data in a collaborative effort using the developed map for workshop format The geodatabase was created, and all shapefile were imported to the map Using domain value were where possible based on the NTHP's principles Then, field work for data verification Finally, Analysis and presentation of the data for resident in the community.

Participatory Mapping and Classification To begin this the session, a brief PowerPoint presentation was made by the researcher to explain the objective and data collection Each participant was then asked to introduce themselves and give information about the point of interest in the study area After the introductions, Using ArcGIS online to edit feature, a simple user interface for entering data using pre-defined attribute domain, data collected from the member of the group were inputted into the database and classified in as follows: Attribute ESRI describes the domain Domains are used as a way of constraining allowed values for attributed

Field visit The decision was made to visit sites from the workshop, and focus on the participants identified as some tourism activities. The purpose of the field work to gather information on the condition of the site, and to identify what, kind of tourism activities were taking place





Fig.1. Field visit for identification some tourism attractive.



Fig.2. Field visit for identification tourism activities.

IV. RESULTS AND DISCUSSION

According to the geographic information system, the researchers found that the elements near the canal opposite to Wat Taling-Chan floating market, if improved, will create more tourism potentials in Taling-Chan substantially.



Fig.3. element near the canal opposite Wat Taling-Chan.

In regards to the geographic information system, we realized we needed to create models before inputting the information in the physical form of diagrams. There are many tools in making diagrams such as Microsoft Visio, and AragoUML. In this research, we decided to use Gliffy to make diagrams.

Models are in the forms of squares. The left section contains category names, and the right side consists of characteristics of each name which have Object as the main key to connecting to the other models.

In regards to Temple Review, which is the additional detail concerning all temples which include routing data of the identified temple, details of the size of the temple area, name, rating, and description of the temple. Both models are connected using Objectedid.

The geographic information system has designed five categories of information which include temples, boat

piers, restaurants, material constructions and types of buildings. Geological information system data can reduce time in searching the information by using the method called "Attribute Indexing." In theory, if not following the steps, the Attribute Indexing system will keep searching the data until it found the information. The example of the characteristics information is when searching the restaurant name "Suan See Krung," the search will need to pass the data row 1-5 before reaching data row 6.

If sorting this information in the form of Attribute Indexing, the user can reduce time to research the data very quickly to boost the potential in searching the database without the need to search data by each row and find the wanted information. The speed of Attribute Indexing is dependent on calculating rules.

From this point of calculating rules, the users can evaluate the speed in creating Attribute Index before building it to reduce the time before creating the actual Attribute Indexing.

In summary, the Tourism aspect of the geographic information system data has been found that levels that have been wanted to create the database are consist of temples, parking places, boat stops, restaurants, building utilization and material constructions. There are consultations of characteristic data and the community all the time to create the database so that the community receives true values without affecting the way of life of people in the area as well as creating additional database tables to be more complete.

Researchers also enhance the effectiveness of the database by creating attribute indexing to boost the effectiveness in searching the data to be faster. In creating this database, the researchers also consider the adjustment of the information to be up-to-date. Therefore, the database has been created by segmenting the data for easy maintenance.

For future work, be strengthened. The following are recommended: The stakeholders should be attention to work much more and young people should be train for preserve the geodatabase and repair the geodatabase because the young people have computer skill than elder people in the community.

CONCLUSION

1. The data of PGIS can boost the effectiveness in searching the data to be faster.
2. The data of PGIS easy to maintenancce.
3. The PGIS is the tool for participatory community tourism.

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