

Valuable Heritage Shaping City Glory Employing With GIS

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ABSTRACT

Heritage is an idea that sets in the past. India is evidence of a large number of human habitations; some of them left their identity through heritage assets. The task of bringing heritage to an audience at local or national level is enormously challenging. It becomes necessary for a planner to a careful presentation of the heritage assets. For encouraging heritage tourism, present literature study intends to assess the valuable heritage properties-precinct and to address GIS mapping. Here literature carried out from several research papers, books, and websites which cover the specific potential places having heritage values.

KEYWORDS: *Heritage; Culture Diversity; History; GIS; Tourism*

INTRODUCTION

Heritage is a wide-ranging concept which comprises the cultural as well as natural surroundings including built structures, historical places-precincts, such sites, cultural practices and such so. Built as well as natural heritage crucially linked with past and present which shapes the urban and built environment. Heritage furnishes vital knowledge about the ancient cultures, customs, uses of materials, built forms, the way of life of people, arts, and architectures. Several areas are concerning with physical, social, economic aspects of a society of a particular era. Therefore, it becomes necessary to assess the repository of knowledge of heritage composition, which required careful preservation, conservation, and management appropriately.

A GIS popularly known as Geographic Information System is a computer-based set tool. Application of GIS in the heritage tourism is to create awareness of the existence of the tourist attraction center to the local community as well as the prospective visitors. GIS gives the valuable information on the tourist sites through different base maps, thematic maps, digital images and similar manner. Planning activities such as developing location maps, road network analysis, route planning and so many similar events by planners are a tremendous job without the support of GIS.

The aim of this literature study is to understand the importance of heritage as heritage is a valuable asset to the city as well the country. The promotion, enlightenment of heritage and cultural diversity of any specific place are challenges for planners. There are many heritage sites exist along this world nonetheless people less explore due to the inappropriate presentation of those places can lead to a lack of appreciation of heritage among the society. People are less aware of the significance of heritage as a result of accepting modernization which needs highlighting. To promote them is under the purview of an urban planner.

CRITICAL LITERATURE REVIEW

A literature review is documentation of state of the art. Here the scholarly literature is of articles, books, research papers, reports and other sources like a website which relevant to heritage and GIS application in the heritage tourism which critically evaluated.

Heritage in the planning point of view

Following are the critical literature review under the planning of heritage by means of modeling

Cojocariu, S. (2015) developed the cultural route in Romania as considering valuable asset through the promotion activities. The researcher found that economic, social; environmental, as well as cultural impacts, are valuable assets in Romania for the development of cultural routes (Cojocariu, 2015).

Ismail et al. (2015) discussed of the heritage street that known as Tan Hioh Nee Street in Johor Bahru, Malaysia where 65 buildings along the heritage street have survived. The primary intention of this research was a preservation of historical and cultural characteristic of the city. The study shows that street was famous only at night because the focus of the visitors sold of goods and the eateries at the night bazaar (Ismail, 2015).

Sanja Bozic et al. (2016) constructed the Cultural Route Elevation Model (CREM) for the assessment of cultural routes on 'The trail of Roman Emperors,' as one of a unique heritage routes in Serbia. In such model neither all sub-indicators have the same influence on the final assessment score, nor should gain the same attention when planning future improvements of the heritage (Sanja Božić, 2016).

Rodzyah Mohd Yunus et al. (2015) aimed to set a strategy for making a great heritage street in the Jalan Hang Jebat, Melaka, Malaysia. The objectives were to identify the strategy, to classify the strategy and at last to compare and find the best strategy. Finding best strategy was the revitalization strategy which reflects the individual view of chosen total population of study-street. Concluding this study, the heritage street gives significant impact to revitalization efforts (Rodzyah Mohd Yunus, 2015).

Petr Aksenov et al. (2014) presented the concept of "smart routing" as a new recommender system for tourist focused on cultural tours in a city. The aim of the "smart routing" recommender system is to achieve the best possible cultural and overall experience for the tourist within the resource and physical. Some challenges can also be identified at each level which seeks to require measurement and relevant considerations. Each tour can be personalized in a "smart" way, from the perspective of both the cultural and the overall experience of taking it (Petr Aksenov, 2014).

Punjab Heritage and Tourism Promotion Board (2000) published heritage walk of Amritsar City. Heritage walk in the 400years old city of Amritsar is guided tour. The walk is of conventional town planning, trade, architecture, and craft which been practiced in the past. This walk covers the fourteen points, starting from town hall to the end of the Ancient passage (Board, 2000).

A.M. Corporation, "Heritage Walk" website is about the city of Ahmedabad published by the Amdavad Municipal Corporation (AMC). The city is the 600 years old and has many India-Islamic monuments involved rich and varied architecture, art, religious places, culture, and tradition. Heritage Walk is started by AMC, CRUTA Foundation (Conservation and Research of Urban Tradition & Architecture) and an NGO. The walk begins from the Swaminarayan temple to the Jama Masjid in between 20 spots covers which comprising numerous "Pols," self-contained neighborhood. Hence, the walk is popularly known as the journey of "Mandir to Masjid." This Ahmedabad heritage walk is being simulated in many historic cities of India such as Jaipur, Amritsar and like conserve heritage and to promote tourism of the city. The guided heritage walk of Ahmedabad is about 2 km length and has a duration of around 2.5 hours (Amdavad Municipal Corporation (AMC))

Heritage tourism

B. Garrod, A. F (2015) written the book on "Contemporary Cases in Heritage" with the aim of academic progress in heritage tourism for students. For assisting the students, each case study gives full theoretical interpretation before analyzing the particular case. For taking a reference, every chapter provides the subsidiary student material related to the case study, including advanced reading and related websites. This book is an educational supplement for the students and instructors to the field on heritage tourism (B. Garrod, 2013).

Mastura Jaafar et al. (2015) employed the social exchange theory to discover the effects of a campaign to improve resident's awareness which found the how and why the residents identify the positive and negative perceptions and effects of tourism. It shows that young residents interested to promote and support the WHS with the positive attitude (Mastura Jaafar, 2015).

Ursache, M. (2015) analyzed the tourism and heritage tourism can associate with the sustainable development and economic development in the South-East Europe. The significant finding is that heritage tourism is attractive concerning economic revitalization strategy for South East Europe that shows heritage travelers stay longer and they spend money more than other types of travelers (Ursache, 2015).

Heritage implication

Aaron Yankholmes et al. (2015) examined the visitor's behavior, their types, knowledge, attitude, a motive for visitation and sensitivity to the other visitors of slavery heritage sites in Ghana. Observations show that people were found to be different in racial, geographic and experiential. Finding of this research is places have not only symbolic significance, but the different visiting group have their differential connection to the past and the purpose of trips. Thus, every site has a different meaning on different scales as markers of identity by each visiting group taken not granted (Aaron Yankholmes, 2015).

Marius-Razvan Surugiu et al. (2015) explore the role of social media in sustaining the development in Romania of heritage tourism entrepreneurship because of the expansion of information and communication technologies and chief the emergence of social media. Researchers introduced the innovation of ICT in the heritage tourism which added more value for the both entrepreneurs and visitors of the sites (Marius-Razvan Surugiu, 2015).

Nurlisa Ginting et al. (2015) studied the factors that influence the identity of any place those are continuity, distinctiveness, self-esteem and self-efficacy. Researcher argued that continuity aspect only could not play a significant role because all the elements that are forming the place identity should be mutually supportive and equally play a role in maintaining it (Nurlisa Ginting, 2015).

Petr, C. (2015) determined that how to make monument-visitors from the just sight-seers. For making tourists more

interested in visiting the core monuments take two considerations. First, is fulfilling the educational purpose of heritage by motivating them to visit the monuments. Second is satisfying financial demand by pushing tourists to enter the monuments. The study identified that can be visitor's expectancy for a visit is a good predictor that makes efficient monument visit which makes monument-visitors from the sight-seers (Petr, 2015).

Rashid et al. (2015) reviewed that heritage environment can bring people together from the different fields such as researchers, conservators, policy makers practitioners as well as a community who concerned with the past in the present about the culture and heritage (Rashid, 2015).

Johanne Dueholm et al. (2014) reviewed the different concepts of authenticity including the perception level of authenticity to the managers and attitudes towards the new technology as an interpretation media to the tourists at burial in Lindholm Høje and museum in Denmark. The researcher concluded heritage manager's role is important to deal with issues related to authenticity, authentication process. The study gives the idea of object and experience of the authenticity relation that needs to be taken in combination. Also, it makes theoretical as well as an empirical contribution towards the conceptualization of authenticity (Johanne Dueholm, 2014).

Lim Tiam Chai (2011) reviewed the city of Penang which is known through unique heritage, lively culture, exotic, diverse ethnic groups which in the tourist industry, its known as 'The Pearl of the Orient.' The researcher concludes after study that "culture" as one of its most valuable tool for its tourism industry and the sustainability of this culture is much depending on the compliance of its local community to keep and continue the culture itself within them where tourism activities play a role as an enhancement (Lim Tiam, 2011).

Kelly (2009) stated about the aspects of heritage such as definition, policy, and governance in context to heritage, commodification, tourism regarding heritage, heritage interpretation and representation, authenticity of heritage, the politics of heritage and identity and at last world heritage conservation and management. Primary outcomes from this study are heritage has an enormous value at the multiple scales, and hence it's worthy of conservation. New forms of heritage, identity, authenticity, and presentation will remain rise are continually renegotiated over time and space, in this changing world (Kelly, 2009).

Gandhi Avaniiben R. reviewed the heritage of Surat city which has a history of having business linkages with many countries. Surat has a long and rich heritage, not only regarding building but cultures, arts, historical association, trades and associations with notable selves and events. The researcher concluded that heritage in Surat city need different planning strategies in CBD area to conserved heritage and public awareness is also required (Gandhi Avaniiben Rakeshkumar1).

Economic significance of Heritage

Dmitry Vorontsov et al. (2015) studied the role of cultural heritage in countries GDP, technical development and socio-economic development of the European Union regions especially Italy and Greece. They identified factors which have some positive as well as negative characteristics. The export strategy took into consideration which provides the using and promotion of individual cultural product on various categories of tourists. From this strategy, researcher built algorithms by the results of this strategy's tasks (Dmitry Vorontsov, 2015).

Gulnara Ismagilova et al. (2015) explore the role of historical and cultural heritage in tourism as part of the social and economic development of Eastern Europe region. A Cultural capacity of the any of region is express in its historical heritage. A finding of this study is that tourism gives knowledge of life, history, culture, tradition, customs of their own and other people and it solves the problem of local employment as it's providing them workplace. Historical and cultural tourism is leading places among types of tourism which encompass history as a factor of an attraction of tourist stream (Gulnara Ismagilova, 2015).

Heritage modeling

Sarach, L. (2015) emphasized on the heritage management interpretation in the industrial clusters through developing heritage management model. Heritage development process involved the people, knowledge, innovation and infrastructure. The heritage management model made which gives the information about the heritage from the industrial clusters. Finding of this study is heritage management in the industrial clusters has particular aspect which are the classification of industrial clusters and heritage development process (Sarach, 2015).

Vasile Valentina et al. (2015) presented the new form of cultural consumption model through emphasizing of young generation participative the in-situ activities. Primary challenge recognized that came from the supply side which needs to revise of consumption model profoundly (Vasile Valentina, 2015).

Conway et al. (2014) described the World Heritage Rock Art Site of the Sierra de San Francisco in the Mexico with the aspects of Public and Private. The study found two axes: Tangible/Intangible and Public/Private that are distinct. Tangible and intangible are nature of the heritage itself that describe its form. Public and private are the focus on the values and attitudes about heritage, predominantly in its social and institutional context. Therefore, four heritage types are possible long of these axes: a tangible heritage that is public or private and intangible heritage that is public or private. Concluded this study, there is the isolation of the heritage site, so it needs to give some time and space to the ranchers for developing heritage tourism into integrating with World Heritage Site tourism for which they are known (Conway, 2014).

Damianos Gavalas et al. (2014) enlighten mobile recommender system which is widely used in tourism as it gives an accurate location. In these recommender systems, various services offered including POIs recommendations,

tourist services recommendation, collaborative user-generated content and social networking services for visitors, routes and tour proposal and such so. The study concluded mobile tourism had been the big ground of research for mobile recommender systems that worked on a systematic approach which is impressive and fast growing field of software systems (Damianos Gavalas, 2014).

Jennifer Laing et al. (2014) illustrated to determine the experiential value from the Chinese heritage precinct in Bendigo, Australia by the uses of cultural tourism potential audit tool. This tool analyzed experiences which divided into the two types or categories: supporting experience and peak touristic experience. The finding of this study is that there is a need for integration of both the experience to construct a consistent and appealing narrative for tourist and the precinct (Jennifer Laing, 2014).

Joan Borràs et al. (2014) published recommender system with its application in tourism that employs Artificial Intelligence (AI) techniques with the provision of up to date survey of the field. The main aim of this study is to provide customized information to users based on their preferences, needs, restrictions and tastes. Researchers also provide basic guideline after this analytic process that can be followed in the design and development of tourism recommender systems (Joan Borràs, 2014).

Heritage stands with GIS

Akukwe et al. (2014) performed the Geographic Information System (GIS) is a tool in the tourism that aid in an effective decision-making with the competing economic, social and environmental demands of sustainable development. The study area is carried out is of Nigeria. The study also defined the GIS and tourism with the capabilities of GIS include some common tourism related issues and GIS application. The study found that use of GIS in tourism is recommended due to its easiness and fastness nature in identifying tourist sites and attractions with accompanied detail such as accurate location, road networks, the distance between attractions and such so (Akukwe, October 2014).

Davide Di Pasquale, A. L. (2013) Developed the interactive map through information and communication technology (ICT) for the Albania cultural heritage. WebGIS used to a mapping of heritage site which is based on open source technology; a process involved developing the prototype, annotate data, data manipulation, data retrieving at last layout which directed available to the user with geo-referenced. The researcher concludes that there is need to promote non-IT persons in developing WebGIS application for the mapping of heritage sites (Davide Di Pasquale, 2013).

Leong et al. (2008) studied the world heritage site of Luang Prabang, Lao PDR in context with GIS. The study covers the GIS implementing in Asia, Local situation of GIS usage in Luang Prabang and the GIS in managing heritage sites. Implementing GIS determine the successful factors and barrier factors. Finding of this study is that analysis of the current situation in the usage of GIS identified some

problem and for remedy measures of these problems there must be standardization of GIS data for sharing among the different users (Leong, 2008).

Urban Management Centre did the grading and listing of built heritage of Surat city. The Surat Municipal Corporation (SMC) concerned about the heritage of the city under which SMC hired UMC to conduct a critical survey of the city's tangible and nontangible heritage and document them to create a policy for setting up regulations to aid heritage conservation. UMC also used the GIS to generate thematic maps for further analysis and decision making by the Municipal Corporation (Urban Management Centre).

CONCLUSION

Heritage has many substances in the field of socio-economic development, countries GDP, culture capacity of the people which strengthen up through the proper demonstration of heritage assets. Heritage also has an enormous value at the multiple scales, and hence it's worthy of conservation. GIS verified as a well-built tool in the area of heritage tourism planning and presenting with accuracy hence is a best way out. Smart routing or theme routing of heritage assets is one of the best means for pushing and promoting among the various recommender systems. Heritage tourism encouragement is a solitary part under the present literature study. There must be educated to people for the value their heritage in the present and for the future generation.

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