

THE POTENTIAL OF IMPLEMENTING INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN SPECIAL INTEREST TOURIST DESTINATION: AN EXPLORATORY STUDY OF INTERNATIONAL TOURISTS OF SUBAK CULTURAL LANDSCAPE IN BALI PROVINCE AS UNESCO'S CULTURAL HERITAGE SITE

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ABSTRACT---Tourists can feel the added value of a destination with the application of Information and Communication Technology (ICT) which is currently being promoted by the government and managers of tourist attractions in various countries. Cultural Tourism is a tourism segment that is being developed and integrated with ICT. The Subak Cultural Landscape Destination which is a UNESCO Cultural Heritage located in Bali is a destination that is visited by many tourists, but not yet equipped by ICTs to add value and provide more experience to tourists. The design method in analyzing ICT devices is needed by tourist destinations especially the Subak Cultural Landscape to enrich the destination. Using qualitative methods, open-ended questions can be disseminated to tourists who have visited all Cultural Landscape destinations. The result is a coding design whose application can be used to determine the ICT tools needed while still promoting the concept of sustainability tourism.

Keywords---ICT, Tourism, Sustainability, Subak, World Heritage

I. Introduction

Information and Communication Technology (ICT) has been a major driver of the changes of tourism industry to a new form with adaptive and interactive operational and strategic management that have a major impact on its business and stakeholders (Law, Leung, & Chan, 2019; Hausmann & Weuster, 2018; Tscheu & Buhalis, 2016). Researches on ICT in tourism and hospitality objects are widely discussed, both in tourism or Information and technology domain because of unavoidable technological development which spread to all sectors, including tourism. However, the proper use of ICT

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will greatly affect the development of the destinations and have a further impact on urban and rural areas (Mariani, Baggio, Buhalis, & Longhi, 2014).

Trauer (2006) explains that there is a new classification of the tourism industry where tourists are willing to pay to get optimal experiences that offer emotional stimulus. Tourists are not only willing to pay for just a product, but further for the feelings they get. This phenomenon which is often referred to as Special Interest Tourism began to spread especially in the early 1980s until now. Special interest tourists tend to be different from tourists in general, they want a new atmosphere, special experience in immaterial qualities, things related to aesthetics and a different atmosphere. They seek experiences that are full of intimacy, intensity and complexity.

Special Interest Tourism has the opposite character of mass tourism, where the focus of special interest tourism is a new form of tourism that has the potential to meet the needs of tourists. These include rural tourism, adventure and nature tours, historical and cultural tours, and festivals. Indonesia is a country in South East Asia which has so many tourist attractions including Special Interest Tourism attractions. The tourism industry in Indonesia has grown quite rapidly in recent years and contribute 4% of the total economy. Although it has grown quite rapidly but still the government wants an increase of up to 8% of GDP. The target is around a visit of 20 million foreign tourists, with a target of Rp 260 trillion in foreign exchange income. This is because even though it managed to meet the 2015 target of nearly 10 million foreign visitors, it turned out that this was still far below neighboring countries such as Singapore which managed to bring in 15 million foreign tourists or 27 million Malaysians.

One of Indonesia's tourist attractions related to the cultural activities of Special Interest Tourism which is also recognized as one of the World Heritage Sites by UNESCO is Subak in Bali Province. Subak is a community organization that specifically regulates the irrigation system of rice fields which is closely related to culture and religion in Balinese society. Special Interest Tourism does have a niche market target that is sometimes overlooked by producers and managers of tourist attractions in general. However, if this segment is measured and managed properly, Special Interest Tourism can contribute significantly to the number of visits of a destination (Mckercher & Chan, 2005). This may come as no surprise in view of the fact that theoretically sound and empirically grounded research on ICTs in the field of cultural and heritage tourism is still in its beginning, especially with regard to marketing and audience engagement issues (Hausmann, Weuster, & Nouri-Fritsche, 2015; Pantano & Servidio, 2010). However, even though managers of Cultural Heritage sites face shortcomings in marketing to compete with another similar attractions, investing ICT in their sites can give a huge impact which can further affect to competitive advantage (Tscheu & Buhalis, 2016). Although the traditional non-digital tools such as brochures and tour guides still more widely used by the producers, ICT allegedly can changes the way in which ancient Cultural Heritage is analyzed (Brogni, Avizzano, Evangelista, & Bergamasco, 1999).

The purpose of this study is to fill the gap which research intended to direct the attention to the underdeveloped field but highly relevant for the Special Interest Tourism context, especially Cultural Heritage tourism. This can be broadly explored because Special Interest tourists are willing to pay more for experiences which can be embedded in the application of the ICT. This study tries to explore what Special Interest Tourists think about the implementation and use of ICTs regarding the added value of the experience which can further affect the marketing and competitive advantage of the sites. The structure of this paper is as follows: the next section is the literature review followed by the theoretical framework. The proposed methodology of qualitative analysis from the in-depth interviews with tourists from Subak locations will be

provided. This paper will be concluded with the expected result of the analysis related to the managerial implications in the implementation of ICT.

II. Literature Review

For the purpose of this study, the term ICT functions as a general term that encompasses a variety of digital communication tools, devices, and technologies, as well as various services and applications associated with it (Blurton, 1999; Lewis, 2009). The use of ICTs for sustainable tourism helps innovation by encouraging better partnerships with stakeholders and also engaging in dialogue with the community (Ruggieri & Calò, 2018). To support sustainable tourism, managers must first be able to interpret what tourists really want by utilizing the use of ICT. ICTs have dramatically changed the way in which information is collected, stored, managed, processed, and distributed (Ali & Frew, 2013; Buhalis, 2003). To understand effective direction, we need a definition of sustainable tourism. The official definition of sustainability in the field of tourism was provided by the WTO in 2005: "The principle of sustainability refers to the environmental, economic and socio-cultural aspects of tourism development and an appropriate balance must be established between these three dimensions to guarantee its long term". To achieve this goal, the analysis of the actual scenarios at the destination must be defined through a set of tools to evaluate the impact of tourism (Ruggieri & Calò, 2018). ICT can be an innovative practical approach for destination managers in their struggle to support sustainable tourism. The fundamental issue for the tourism sector is how to adopt sustainability strategies as well as other policies in the future. ICTs help personalize experiences to better meet the specific needs of different visitor segments (Damiano et al., 2008; Etzeberria et al., 2012). ICT also enables the development of education by means of entertainment-oriented learning (Bogdanovych, Rodriguez-Aguilar, Simoff, & Cohen, 2010; Chen et al., 2010; Pantano & Corvello, 2014). Various studies agree that ICTs can expand the attractiveness of cultural landmarks for tourists. Its use helps visitors to better understand the heritage, enriching their experiences so as to foster a deeper attitude about tourists (Garau, 2014; Grainger Clemson, 2014; Tscheu & Buhalis, 2016).

The tourism industry with a common market share where consumers want something uniform in each destination visited such as good quality accommodation or a comparison of value with costs incurred is explained in the concept of General Interest Tourism by Brotherton & Himmetoglu (1997). This is allegedly triggering the occurrence of mass tourism, where the managers offer a concept of tourism that is almost the same as good quality accommodation or tour packages at low prices. This happened a lot before the 1980s (Hall & Weiler, 1992). In a niche market there is a certain area in the market for products and consumers that can be utilized. This is based on a premise where the market cannot be seen simply and homogeneously with the needs of consumers in general, but must be seen as a collection of various kinds of individuals with very specific needs related to the quality and features of certain products. This collection of individual characteristics and very specific needs can be aggregated into several segments in a niche market. In the context of tourism, niche tourism can be divided into two, namely macro niches, consisting of cultural or rural tourism, as well as micro niches, such as culinary tourism, sports, voluntary activities, and adventure (Mckercher & Chan, 2005).

Regarding special interest tourism, it should be explained beforehand the differences in the characteristics of tourism in general with special interest tourism. Brotherton & Himmetoglu (1997) in their research explained the difference between tourism in general and special interest tourism by using a continuum on the level of tourism. This continuum starts with General Interest Tourists (GIT), followed by Mixed Interest Tourists (MIT), and Special Interest Tourists (SIT), each of which has different characteristics. Special interest tourists have more orientation towards activities or interests that they want to do or fulfill. This is related to the characteristics of individuals who tend to be smart and critical and have enough

traveling experience so that tourist destinations are no longer an important factor in travel decision making. The main priority in a tour is the activity you want to do, where the question that is often asked before going on a tour is not "want to go where?" But rather to "want to do what?" Only then the destination is determined. The World Tourism Organization (1985) cited by SJ Lee & Bai (2016) explains that what is meant by special interest tourism is a type of specialized tourism that involves individuals or groups who have similar interests and then realized in a visit to a destination. This definition reinforces the statement that what special interest tourists pursue is not their destination, but what activities or activities can satisfy the desires of tourists. Stebbins (1982) describes tourism of special interest as a form of "serious leisure" in which the perpetrators tend to pursue their interest in achieving self-actualization, social interaction, and attachment through special activities.

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Historical tourism is a branch in the tourism industry, especially special interest tourism based on experience where the visitors have certain motivations related to aspects of history, art, lifestyle, and culture (Trauer, 2006: 183; Li & Hunter, 2015: 248). Historical tourism offers a wide variety of product mix lines, ranging from monuments to lifestyles, which shift tourism trends from recreation to a vehicle for self-contemplating for what happened in the past (Vasavada & Kour, 2016: 22). By visiting historical sites and ruins, one can do a flashback of what has happened, as well as what shapes the current environment. This opens up new market opportunities in the tourism industry. Historical tourism which is closely related to the experience aspect has been transformed from what was originally just a product displaying activity, now changing more towards fulfilling the quality of visitors' personal experiences (Apostalakis & Jaffry, 2005: 309). Historical tourism also provides an opportunity to photograph the past to the present which allows visitors to experience what happened in the past by interpreting what they are experiencing now (Nuryanti, 1996: 250). All of these experiences, such as daily activities carried out by residents, traditional ceremonies, or religious rituals can be felt by visitors according to their respective interpretations.

A destination is defined as a geographical area which contains tourism products and services that will be enjoyed by tourists as part of the experience managed by the organization (Ruggieri & Calò, 2018). To support good destination management, the use of ICTs that are commonly used today both in terms of demand and supply are:

- Destination management system (DMS)
- Intelligent transport system (ITS)
- Environment management information system (EMIS)
- Location based services (LBS)
- Global positioning system (GPS)
- Geographical information system (GIS)

Within the Subak Cultural Landscape currently only GPS is supported by Google to facilitate tourists in finding location coordinates. In addition, other ICT implementations have not yet been found either to simply facilitate visitors in understanding cultural or historical aspects, or add to the entertainment side. In addition, there are several other ICT tools that can be used to support and add value to destination visits. These tools include Community Informatics (CI), Virtual Tourism (VT), and Computer Simulation (CS).

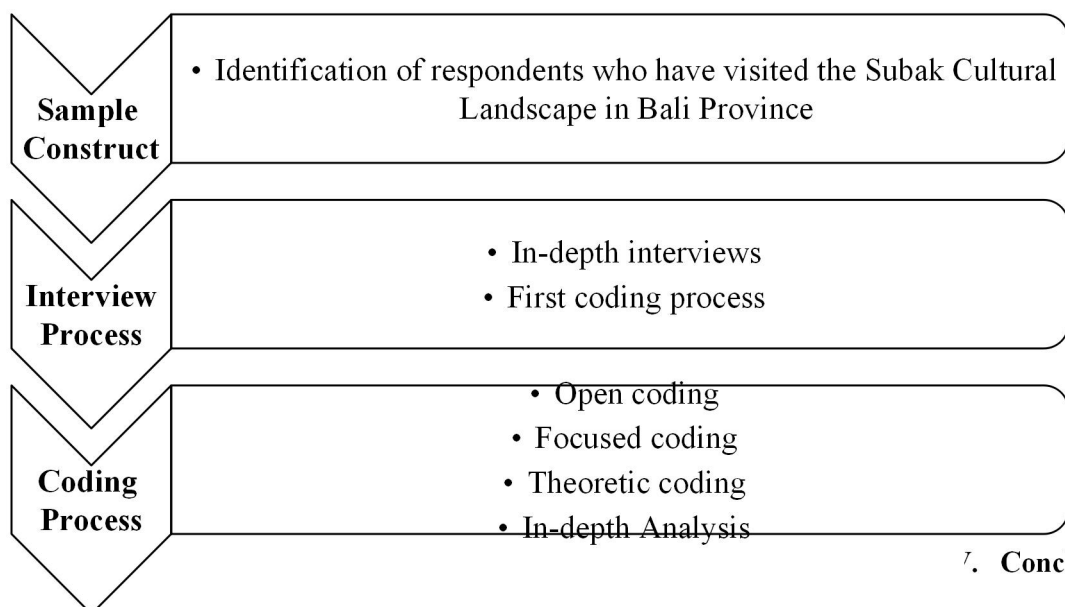
III. Methodology

Since this research is still in its early stages, we chose a qualitative approach by conducting in-depth interviews with tourists (Yin, 2015). This means that although the findings of this study cannot be generalized later, the results will be used as an additional insight in the future about understanding the relevance of ICT from a demand-side perspective. We limit respondents to 10 people who have visited the Subak Cultural Landscape which is scattered in several locations in the Province of Bali.

Demand-side perspective is used since we want to capture what is actually desired and needed by tourists in each visit to each destination by utilizing ICT as a medium to add value. Based on observations of the 5 Subak Cultural Landscape locations, there is practically almost no support for ICT implementation to help visitors understand every aspect of history or culture offered by each destination.

IV. Discussion

Types of in-depth, and semi-structured interviews were chosen to collect qualitative data that are useful for research. Respondents will be given a number of open-ended questions about the implementation and use of ICT in the context of cultural tourism. The next step is the interview transcription process. By using the inductive coding approach (Inductive Coding Approach), the transcript will then be used to identify patterns and statements that are repeatedly mentioned in the text. After that the material which is considered relevant is then summarized and calculated based on certain categories that are considered to be frequently released before then analyzed and interpreted in depth at the end. The coding process of the results of the interview in this study was divided into 3 stages (Bryman, 2012). In the open coding process, important ideas and sentences are summarized and then written down in the transcript. All statements are then translated into Indonesian to facilitate analysis. In the focused coding process, all patterns from each category are collected and then marked. The third stage of the data analysis process is theoretic coding. With the help of the previous two stages, relevant categories of research can be identified. These categories are used to create themes which are then linked into a narration (Krippendorff, 2012). A description of the research design is summarized in the figure below.



7. Conclusion and

Recommendation

To achieve a sustainable tourism by using ICT certainly cannot be achieved in a short time, especially with the current Cultural Landscape conditions which indeed have not yet applied ICT in its management so far. The results of this study are expected to be useful for managers and the government in the provision of ICT equipment that can add value to tourists for achieving sustainability tourism. However this research is limited only to the proposed tools that can be used in a tourism destination. The application of ICTs in the context of tourism, especially historical tourism can facilitate access, add experience, and even open the way for visitors who previously might not have thought they could enjoy their tour, such as people with disabilities. The application of ICT can also give visitors an idea of the authentic atmosphere of the site in its time. Integration between situ Subak Cultural Landscapes can also be described in detail using ICT.

In the future, further research can be conducted on how the suitability of ICT tools for a destination by using both qualitative and quantitative analysis. Research with different units of analysis can be done because each destination has its own characteristics so that the application of ICT can be different from one another. Similar research oriented to the supply side will be useful for the development of science both theoretically and practically in the future.

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