

The Relationship between Digital Marketing Dimension and International Virtual Heritage Tourism in Indonesia: A Conceptual Model

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ABSTRACT

In the midst of Indonesia moving from a pandemic to a Covid-19 endemic, the tourism industry is showing an inconsistent trend. With the development of information and communication technology, it is important to provide a new model to provide innovation in tourism by utilizing technological advances supported by digital marketing. The purpose of this conceptual paper is to provide an alternative framework for virtual tourism and digital marketing. The dimensions of digital marketing consist of website design, social media marketing, search engine optimization, email marketing, and affiliate marketing. Within this conceptual framework, there are several variables such as online destination knowledge, online destination authenticity, entertainment, enjoyment, and international virtual heritage tourism. There are five hypotheses proposed by the researcher in this conceptual article. This paper suggests future studies to test it empirically with collected data from respondents and analyzed using multiple linear regression analysis, F test and t test.

KEYWORDS: Digital Marketing, Virtual Tourism, Entertainment, Enjoyment, Online Destination Knowledge, Online Destination Authenticity

I. INTRODUCTION

The international community recognizes that the role of the tourism sector is now becoming more important in line with its development and contribution through foreign exchange earnings, regional income, regional development, as well as in the absorption of investment and labor, along with business development in a country (Soulard, McGehee, & Stern, 2019). This makes many countries try to strengthen the tourism sector industry with various strategies to gain a competitive advantage (Shafiee et al., 2019). The development of the tourism sector in Indonesia in 2019 has increased significantly compared to the previous year. The national tourism sector in 2019, was able to become one of the largest contributors to GDP with a foreign exchange value of more than Rp. 280 trillion, absorbing a workforce up to 12.6 million people and bringing 20 million foreign tourists (Sukmadewi, Putra, & Suardana, 2019). No wonder if Indonesian tourism competitiveness is ranked 9th in the world, number 3 in Asia and number 1 in Southeast Asia.

Tourist destinations are the key to increasing tourism productivity (Liu & Wu, 2019). Previous research show compared the effects of the productivity of various tourism sectors on economic

development (Blake, Sinclair, & Soria, 2006). In addition, the Indonesian government hopes that the tourism sector can become an engine that drives the economy so that it can contribute to the welfare of the community (man Abdillah, 2017). The tourism sector is very important for many countries because it forms a large productive chain that involves many business actors from various industrial sectors. Even the total number of interacting direct and indirect activities in the tourism industry forms a large system with different sub-systems (Chim-Miki & Batista-Canino, 2017). Tourism affects economic growth so tourism development must be carried out in order to make a continuous contribution to economic growth. Market size data for consumer virtual reality software and hardware predicts an increase of US\$ 5.1 billion in 2023 (Santamaria & Filis, 2019).

The United Nations World Tourism Organization states that heritage tourism represents between 35–40% of all tourism worldwide and is growing at around 15% per year. This number shows that heritage tourism has a growth rate of three times more than other types of tourism in general. Heritage tourism is a trip that is packaged by visiting places that are considered historically important for an area or city that can be a tourist attraction (Su, Wall & Xu, 2016).

However, at the beginning of 2020, the Covid-19 pandemic had hit globally including in Indonesia which had a significant impact on various important sectors such as politics, economy, tourism, social, and culture (Hanoatubun, 2020). The implementation of social and physical distancing implemented by the government in various countries has had a tremendous impact. Not only having an impact on tourism entrepreneurs, tourists are also forced to refrain from doing tourism activities in order to control the spread of this virus which ultimately has a bad impact on global tourism due to the reduced number of foreign tourists (Sigala, 2020).

As a result, in 2020 according to the Central Statistics Agency (2020) the number of foreign tourist arrivals to Indonesia only reached 3.09 million visits, a decrease of 59.96 percent compared to the number of foreign tourist arrivals in the same period in 2019 which amounted to 7.72 million visits. The tourism industry has become difficult to rise because the Covid-19 pandemic has a multiplier effect because the tourism sector is supported by various sub-sectors, one of the sub-sector is MSMEs (BPS, 2020).

This pandemic causes changes in consumer behavior in consumption patterns and lifestyles that rely more on the internet to meet their daily needs. Changes in consumer behavior are forcing marketers to be able to rethink about the best and latest strategies that must be applied in their business. Therefore, a digital marketing strategy is also needed to deal with changes in consumer behavior who have become digital savvy (Xiang, Magnini, & Fesenmaier, 2015; Ahmad et al., 2020; Abrardi, Cambini, & Rondi, 2022).

A digital marketing strategy is needed to increase foreign tourist visits to do heritage tourism virtually. Virtual tourism can use multimedia elements, one of which is virtual reality which can be enjoyed directly through their respective gadgets (Yung, Khoo-Lattimore, & Potter, 2021). Global digital transformation has created opportunities for various industries to develop, including improving the travel experience. Virtual tourism can be a means to foster visiting interest for potential international tourists (Putra, Akhirianto, & Aisyah, 2021).

Tourism industry cannot be separated from the role of information and communication technology that supports it (Sangchumnon, 2019). With the development of industry 4.0 which is marked by the convergence of information and communication technology in all sectors and regions, tourism activities are not only limited to conventional tourism activities, but are able to take advantage of the benefits offered by advances in information technology and industry 4.0. As we can see the internet and information technology are currently able to support marketing and promotion activities of a tourist destination and also share experiences of tourists enjoying their visit so as to attract colleagues, friends or family members to come on vacation (Ngo, Lohmann, & Hales, 2018). Of course the tourism concept

can take advantage of the strategic support offered by advances in information and communication technology in this 4.0 industrial era (Çakmak, Lie, & McCabe, 2018). For example, the concept of technology-based tourism has begun to emerge in the form of technopark and educational tourism which has become the new prima donna in the world of tourism.

The influence of technological developments plays a major role in the progress of tourism. Technological advances such as artificial intelligence, virtual reality, and augmented reality have also contributed to the development of virtual tourism (Radicchi, 2013; Lee, Hunter, & Chung, 2020). In addition, the experience and authenticity of online tourist destinations are also considered by researchers as determinants of the development and progress of virtual tourism. Therefore, this research questions and research objectives for this conceptual paper are shown in Table 1.

Table 1. Research Questions and Research Objectives

Research Questions	Research Objectives
To what extent does digital marketing related toward online destination knowledge and online destination authenticity?	To examine digital marketing positively related toward online destination knowledge and online destination authenticity
To what extent does online destination knowledge related toward international virtual heritage tourism?	To examine online destination knowledge positively related toward international virtual heritage tourism
To what extent does online destination authenticity related toward international virtual heritage tourism?	To examine online destination authenticity positively related toward international virtual heritage tourism
To what extent does entertainment related toward international virtual heritage tourism?	To examine entertainment positively related toward international virtual heritage tourism
To what extent does enjoyment related toward international virtual heritage tourism?	To examine enjoyment positively related toward international virtual heritage tourism

II. LITERATURE REVIEW & HYPOTHESES DEVELOPMENT

A. Technology Acceptance Model

Technology Acceptance Model (TAM) was first proposed by Davis (1989) which is the result of the development of the Theory of Reasoned Action (TRA) which had previously been developed by Fishbein & Ajzen in 1975. TAM is a science that studies how users can accept (or even reject) a technology that explains how the influence between attitudes, beliefs and the final system (Davis, 1989). Or in other words, TAM is a method that can be used to find out what factors affect the new technology introduced or to be used. The purpose of TAM is to evaluate how the impact of system characteristics on consumer desires (Lee et al., 2010). TAM has two important factors, namely Perceived Ease-of-Use (PEOU) which implies how the use of technology makes users' lives easier and Perceived Usefulness (PU) which implies how to use technology to maximize their life performance (Davis, Bagozzi, & Warshaw, 1989).

B. Virtual Tourism

Virtual tourism is a combination between virtual reality and augmented reality technology that is able to present the experience of visiting tourist objects through digital technology media without tourists having to attend the location (Nayyar et al., 2018; Ozdemir, 2021). Virtual tourism can have a positive impact on the natural environment of tourist objects because tourists do not have direct contact with the panorama, cheaper, and provide opportunities for tourists to do anything in the world of virtual tourism. The consequence in virtual tourism is that it cannot be reached by all tourists because of the lack of

technology, it does not provide a direct increase for tourist areas except those who have collaborated with virtual tourism providers.

With regard to support for the domestic MICE (Meeting, Incentive, Convention and Exhibition) industry and on the other hand the impact of the Covid-19 pandemic, world heritage sites in Indonesia can be further explored by holding virtual tourism or virtual events located in tourist attractions that are world heritage sites. A world heritage site is a place of culture and nature, as well as objects that have meaning for mankind and become a legacy for the next generation (UNESCO, 2020). World heritage sites in Indonesia that can be developed and explored through virtual tourism include Borobudur Temple, Prambanan Temple, Komodo National Park, Sumatran Rainforest National Park, Lorentz National Park, and Ujung Kulon National Park.

As already explained, world heritage sites in Indonesia can be further explored by holding virtual tourism or virtual events by creating content about tourism objects, which include tours to these attractions. The content can be accessed for free with limited features. If virtual visitors want complete content, they have to pay for a ticket (online) as if entering a tourist attraction directly. One of the world heritage sites in Indonesia that can be used as virtual tourism is Komodo Island National Park. The existence of a virtual tour will allow visitors to explore all places on the island without worrying about their safety when in close contact with Komodo dragons.

C. Dimension of Digital Marketing, Online Destination Knowledge, and Online Destination Authenticity

Digital technology may increasingly become central to social and economic life (McGuigan & Murdock, 2015). The last 10 years or so have witnessed a major change in the way goods are digitally exchanged between buyers and sellers (Ghazawneh & Henfridsson, 2015). Thus, digital marketing is needed to support the exchange of these goods.

Digital marketing is a marketing activity of a brand or product using digital media or the internet. Kartajaya, Kotler, & Hooi (2019) revealed that digital marketing is part of marketing communication. Marketing communication itself is a means that companies use to inform, persuade, and remind consumers — directly or indirectly — about the products and brands they sell. The dimensions of digital marketing consist of website design, social media marketing, search engine optimization, email marketing, and affiliate marketing (Premnath, 2021). The effect of this dimension is to provide convenience for tourists to obtain online destination knowledge and online destination authenticity. Online destination knowledge is knowledge that visitors get online at certain tourist destinations (Antonio, Correia, & Ribeiro, 2020). While online destination authenticity is a clear and detailed description of each side of a tourist destination (Khan & Fatma, 2021). Previous research predicts the influence between obtaining online destination knowledge and online destination authenticity on virtual tourism (Han & Jung, 2018; Artha, Hadi, & Sari, 2020; Atzeni, Del-Chiappa, & Mei-Pung, 2022).

H₁: Digital marketing has a significant positive effect on online destination knowledge and online destination authenticity.

H₂: Online destination knowledge have a significant positive effect on international virtual heritage tourism.

H₃: Online destination authenticity have a significant positive effect on international virtual heritage tourism.

D. Entertainment, Enjoyment, and International Virtual Heritage Tourism

Entertainment in tourism is a location where visitors can feel happiness and pleasure by doing entertaining activities such as music shows, magic shows, comedy, sports, and playgrounds (Besciu, 2013). In terms of virtual tourism, the role of one's fantasy to feel entertainment is very important. Fantasy is simulated by a virtual tour that they follow with image and sound objects (Hossain et al., 2022).

Entertainment has a close influence on stimulating tourists to do virtual tourism so that the entertainment element is achieved. Previous research discusses how entertainment is able to become a driving element in the desire to use digital tourism (Mondal & Samaddar, 2020). However, it is necessary to see how it directly affects tourist's intention in virtual tourism in Indonesia. Based on literature studies discussing virtual enjoyment (Disztinger, Schlögl, & Groth, 2017; Tussyadiah et al., 2018) it can be concluded that enjoyment is an important aspect in the virtual tourism experience that is able to bring an element of fun. However, it is necessary to see how it directly affects tourist's intention in virtual tourism in Indonesia.

Enjoyment is the level of satisfaction, a person's interest in enjoying the use of media, in the context of this research, namely virtual tourism (Huang et al., 2013). Enjoyment involves elements of psychological needs, namely competence, autonomy and relatedness. In Virtual Tourism, the enjoyment element indicates a feeling of "being there", the perception of effectiveness in using technology and the belief that the virtual tourism trip will be useful for their trip to that location. According to Goh and Yoon (2011), enjoyment contributes to the user's desire to use virtual world features (Han, Yoon, & Kwon, 2021; Zhang et al., 2022).

H₄: Entertainment has a significant positive effect on international virtual heritage tourism.

H₅: Enjoyment has a significant positive effect on international virtual heritage tourism.

Based on the hypotheses that have been described previously, the researcher proposes a new conceptual model that has never been done empirically in previous studies. The conceptual model can be seen in Figure 1.

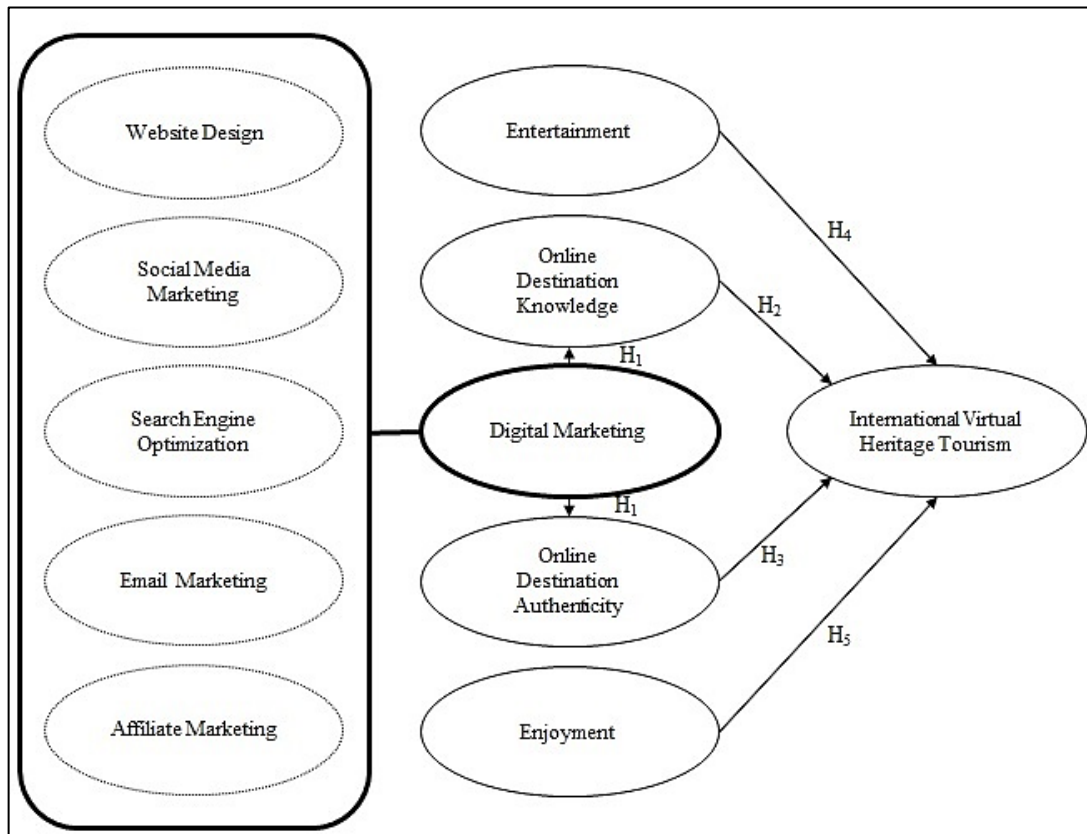


Figure 1. Proposed Framework

III. METHODOLOGY

Researchers adopt a positivist point-of-view, where researchers believe that there will be rational justification for predicting what factors influence the importance of virtual tourism. Positivism is associated with quantitative methods based on statistical analysis. Furthermore, this study adopts the concept of deductive-reasoning, where concepts and theories have been planned in advance and then proven in empirical research. The researcher applies the analytical-survey method to obtain primary data, aiming to determine whether there is an influence between the variables being tested (Hair et al., 2018). This research is classified as a quantitative research. The data collection technique using an online questionnaire.

Researchers suggest that respondents in research based on this conceptual model is prospective tourist that come from abroad or at least in Southeast Asia with tourist attractions as previously mentioned, namely Borobudur Temple, Prambanan Temple, Komodo National Park, Sumatran Rainforest National Park, Lorentz National Park, and Ujung Kulon National Park as can be seen in Figure 2.



Figure 2. The World Heritage Sites in Indonesia

Researchers used closed-ended questions to be more time efficient and focused on elements. The survey uses a 5-point-likert-scale output (1 = strongly disagree, 5 = strongly agree). The researcher suggests the validity test uses confirmatory factor analysis while the reliability test uses Cronbach's Alpha. The analytical technique suggested for future research is multiple linear regression analysis, F test and t test.

IV. DISCUSSION & CONCLUSION

The main purpose of this article is to propose a new conceptual model or framework of virtual tourism, which has never been done before by researchers, as can be seen in Figure 1. This article is a conceptual paper, which is a new conceptual model or framework based on a literature review from previous relevant empirical studies.

Researchers suggest further research using virtual tourism as the dependent variable, with reference to the creation of content about tourism objects, which includes tours to these attractions. The content can be accessed for free with limited features. If virtual visitors want complete content, they have to pay for a ticket (online) as if entering a tourist attraction directly. Furthermore, researchers provide suggestions for holding tours through virtual events, such as virtual automotive exhibitions. This is done in order to support the heritage industry in Indonesia. With the existence of national-scale virtual tourism, it is hoped that the number of visitors who access virtually is equivalent to or more than direct visits, because virtual access can be carried out anytime and anywhere. Of course, virtual visitors can also visit the virtual exhibition on time during the event at the appointed time.

Because this paper is a conceptual article, therefore it has formulated a theoretical framework of virtual tourism based on the previous literature supports. This paper has describes adequate numbers of empirical research on the relevant subjects of the constructs and model. Hence, this paper constructs five research hypotheses that suggests future research to test it empirically with collected data from respondents and analysed using multiple linear regression analysis, F test and t test.

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