

Tangible Digital Tourism Heritage: National Ecotourism Plan in Malaysia

Intan Maizura Abd Rashid¹, Akmal Adanan², Mohd Rasdi Zaini³, Mastura Roni⁴, Syahril Iman Faisal⁵

^{1,4,5}Faculty of Business and Management, Universiti Teknologi MARA, Melaka, Malaysia,

²Faculty of Hotel & Tourism Management, Universiti Teknologi MARA, Melaka, Malaysia, and ³Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA, Melaka, Malaysia

Email: intanmaizuraar@gmail.com

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Abstract

Lately, many kinds of research demonstrate the digital technologies Industrial Revolution 4.0 (IR 4.0) like social media, virtual reality, and augmented realities are vital for future digital tourism. Digital tourism can work across borders, and collaborative work among nations is already growing in recent years. Tourism sector performance contributes to a large part of the Malaysian service economy (The World Factbook, 2019). In 2021, Malaysia has faced an economic crisis and it affects tourism sectors. Moreover, data from the Ministry of Tourism have shown that the number of tourists is decreasing by 1.5% in March 2020. The model specification will assess the most important factors of tourism performance such as the Tangible Heritage and Intangible Heritage that was used by many previous researchers. Using the technique of hybridization this study will improvise the model by adding digital perspectives. The result of this study has indicated that almost all of respondents have a high perception toward tangible digital heritage in Melaka or Penang. This scenario has become a serious issue for the government because Tourism Sector is one of the government's important agendas in the NKEAs through the National Ecotourism Plan. According to the Ministry of Tourism (MOTAC, 2018), the nation's tourism sector is now the sixth-largest contributor to the national economy in 2017. Unfortunately, among all agendas in 21 Action Plans, none of it mentions digital heritage tourism. Hence, the main objective of this study is to adopt a new Heritage Digital Industrial Revolution 4.0 (IR 4.0) Model for National Ecotourism Plan. The findings will help the government in updating the National Ecotourism Plan under NKEAs. Lastly, it will guide the government by understanding the important need of visitors and it can apply to other heritages sites in Malaysia.

Keywords: Digital Industrial Revolution 4.0 (IR 4.0) Heritage Model, National Ecotourism Plan, Tourism Sector Performance, Tangible and Intangible Cultural Heritage

Introduction

Tourism sectors all over the world were hit hardest by the COVID-19 pandemic, especially in tourism-dependent countries like Malaysia. The government has implemented a number of initiatives to lessen the economic impact to tourism related businesses, but in the long run the industry will need to adapt to a post-pandemic “new normal.” The National Tourism Policy 2020-2030 has identified to build and promote sustainable tourism as one of its main strategies for recovery highlighting ecotourism, adventure, sports tourism, island and coastal tourism. As domestic tourism continues to drive the recovery, Malaysia is also gearing up to welcome international travellers by targeting to attract 2 million tourist arrivals with a contribution of RM8.6 billion in the year 2022. Malaysia targeted to reach the target of 24.3 million international tourist arrivals with an income of RM73 billion in 2025 for international tourism and a target income of RM100 billion in 2025 for domestic tourism (Ministry of Tourism, Arts and Culture, 2021). On the basis of a review of the relevant literature, post COVID-19 pandemic and the revitalization of tourism; this study is conducted to investigate the impact of the use of Tangible Digital Tourism Heritage among tourists and to give a review on the current representation related to touristic applications, focusing on the technologies being used at heritage sites. Indeed, the information is very important to facilitate in the expansion of the future National Ecotourism Plan. Technologies helps the national park managers and tourism officials are up-to-date with international trends in concessions management and understand the opportunities and challenges presented by Malaysia’s new national concessions protocol. The new wave of technologies in the hospitality industry has made several contributions towards how it was conducted (Zeqiri et al., 2020). Digital Tourism and the technologies are now reshaping tourism, examines the challenges of the future, allow personalized services and sustainability, and changing the future of tourism sector post COVID-19 pandemic. Paralel to this, Malaysia embarked on a comprehensive digitalisation journey to transform Malaysia's tourism industry towards Smart Tourism to embrace the whole spectrum of digitalisation in providing the necessary tools for the tourism industry to be internationally connected, perform rigorous data analytics of tourism futures and shorten the supply chain. Digitalization is one of the important tools emphasized by the government to harness the competitiveness of Malaysia's tourism industry in an increasingly competitive and uncertain world by increasing revenue, securing partnerships and investments, empowering local communities, and ensuring the sustainability and resilience of the industry (NTP, 2020-2030).

Literature Gap

The demand for digital tourism stems from a complex interplay of socioeconomic, psychophysiological, and technological factors, all of which are focused on individual consumers struggling to maintain balance (Abeelee, 2020). However, because digital well-being cannot be created solely through individual ability, it is more than just personal responsibility (Beetham, 2016; Nansen et al., 2012). Similarly, Gui et al (2017) stated that digital well-being is not only a state attained by individuals through personal skills, but also depends on broader social characteristics that establish norms and common behaviour patterns. In this context, society is defined as a group of participants who have the ability to influence the level of personal digital consumption. This includes technology providers who should work with consumers to create digital well-being (Griseemann and StokburgerSauer 2012). Tourism, as an industry that relies heavily on technology for service provision and delivery, represents the continuation of the digitalization of consumers' daily lives. As a result,

it represents the point at which the concept of digital tourism is combined with the existing health concept, and it has prompted a reconsideration of a new way of thinking that focuses on digital health. To ensure the tourism industry's digital well-being, tourism policymakers and industry members must first recognise the issue before assuming the new roles and responsibilities that arise. Although the problems caused by overuse or abuse of technology are becoming increasingly important and thus obvious to the tourism industry, the industry's complex structure and heterogeneity of participants pose significant challenges to adopting digital well-being. In the tourism business (for example, a holistic and unified approach to digital health in the form of digital health advocated by the Global Health Institute). Digital well-being necessitates one-of-a-kind crossing points, as well as the collaboration of experts who have never previously worked together to create new solutions. This boundary-less multi-sectoral approach is novel (Abraham, 2015) and necessitates rethinking in tourism education and training, academic research, and industry practise. Smart tourism development may help this process because it emphasises government-industry collaboration and new governance mechanisms, but it does not currently prioritise digital well-being as a primary goal. There is no doubt that digital well-being, as a general term, has many meanings for both the people who should be able to experience it and the entities involved in its provision. Therefore, according to one of the frequently cited formulas of digital well-being, it is a framework that takes care of personal health, safety, interpersonal relationships, and work-life balance in a digital environment (Beetham, 2016). According to the same author, digital well-being is achieved by taking safe and responsible actions in the digital environment; involves managing digital stress, workload, and distraction; it involves the use of digital media to participate in political and community actions and the use of personal digital data benefits; emphasizes that all actions must consider their impact on human beings and the natural environment, and requires a balance between digital interaction and real-world interaction (Beetham, 2016). Regardless of point of view, and despite the fact that technology is an important part of consumers' lives, it is clear that digital well-being intersects with physical, emotional, intellectual, spiritual, social, professional, environmental, and financial aspects of overall well-being. Some countries have recently launched various digital wellness programmes, and informal groups formed around digital wellness issues have grown in popularity and recognition among the general public. The threat of tourism to digital well-being is also becoming more and more obvious. The threat of travel discounts to digital well-being is mainly objective and external, caused by the lack of operable digital resources, the scarcity of digital skills of travel service providers, the lack of supervision or organizational support environment, or the adoption of the digital environment. Division (Herdin and Egger, 2017). These threats can be manifested by the prevalence of non-use of ICT and analog quotes, or the use and application of ICT may be excessive and inappropriate. On the other hand, the threat to digital well-being may come from tourists themselves, generated by the same objective factors as tourism products (lack of skills, resources, etc.), or it may be more subjective in nature, manifested as problematic, excessive. or addictive while traveling the way of using technology. The latter can also include a lack of interest in digital well-being or deliberate sabotage of technology (Weaver and Moyle, 2019).

Research Methodology & Findings**Tangible Digital Heritage**

Table 1

Respondents' Perception on Tangible Digital Heritage

Tangible Digital Heritage		Frequency	Percent
Perception	Moderate	10	2.3
	High	429	97.7

Referring to the table above, the result has indicated that almost all of respondents have a high perception toward tangible digital heritage in Melaka or Penang in which the total respondents that having high perception is 429 or 97.7% out of all respondents for this study and this can understand that only 10 or 2.3% of respondents taking moderate perception towards tangible digital heritage. However, this can be proved that most of the respondents agreed that heritage assets in Melaka or Penang are different and unique from other heritage destination. Plus, 429 respondents also recognize historical architectures across Melaka or Georgetown are highly valued and authentic. At the same time, 97.7% of respondents agreed on the heritage assets in Melaka or Penang are well preserved and safe that should be a great destination for heritage tourism in Malaysia to local and international tourists.

Table 2

Respondents' Tangible Perception on Tourist Digital Spending Behaviour.

Tourist spending behaviour		Frequency	Percent
Perception	Low	1	0.2
	Moderate	31	7.1
	High	407	92.7

Based on the result provided in table 2, there are 407 or 92.7% of respondents that have a high tangible perception on tourist digital spending behavior and another 31 or 7.1% of respondents have only moderate perception towards this variables but one respondent has a low perception in tourist digital spending behavior. This is because some of the prices of souvenir and handcraft in heritage sites across Melaka or Penang is not that affordable to bought especially using online and this already being supported by Azila (2017) whereby some of the products in heritage sites are not affordable. 31% of respondents have a moderate perception of the ticket price fee across virtual digital heritage sites in Melaka or Penang but they are still willing to spend more on holidays that can preserve the heritage sites. The researcher also identified that some of the respondents do not agree on the prices of products and tickets across digital heritage sites in Melaka or Penang.

Table 3

Respondents' Tangible Perception on Tourism Digital Application

Tourism Application		Frequency	Percent
Perception	Moderate	12	2.7
	High	427	97.3

Referring to table 3, the result has shown that 427 or 97.3% of respondents have agreed tourism digital application is useful and only 12 or 2.7% have a moderate perception towards

tourism digital application. 97.3% of respondents admit that tourism digital applications apparently can help them to find interesting places in Melaka or Penang which can also save time while traveling. Besides, most of the respondents also agreed that tourism digital application does provide them to reach the destination accurately in future. At the same time, 427 respondents agreed that tourism applications do not only provide a list of interesting places but also provide reasonable price.

Conclusion

The implication of the findings in this study is hope to aid in directing the upcoming national strategy plan that parallel with the objective of the National Tourism Policy 2020-2023 to achieve competitiveness, sustainability and inclusiveness to place Malaysia as a global top ten tourism destination in both arrivals and receipts. Particularly, cultural heritage helped in promote tourism, which boosts social inclusivity, helps local economies, and educates people about culture and history. It was thoroughly delineated that digitalisation allows greater customisation of visitor experiences, and new customised destinations emerge (Dredge et al., 2018). Heritage sites need to be managed sustainably and this could be done by using digital technologies (Kordha et al., 2019). As being highlighted, the government have to take the opportunity to grant more projects to build better facilities and innovations across heritage sites in Malaysia through National Key Areas (NKEA). Thus, the result in this research could provide up-to-date information that meets tourist's expectations. As stated by Ch'ng (2011), the success observed that our heritage is understood and absorbed by the younger generation will knowledge of our heritage and culture survive in the future. Therefore, the transformation of heritage sites by embracing digitalisation could drive innovation and competitiveness towards sustainable and inclusive development in line with the United Nations Sustainable Development Goals. In addition, close collaboration with the ASEAN Heritage Parks and the Asian Protected Areas Partnership (APAP), United Nations Educational, Scientific and Cultural Organization (UNESCO), Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT), and ASEAN Tourism Marketing and Communication Working Group should be implemented to enhance the quality of tourists heritage experience especially in the adoption of Digital Tourism in the future. Tourism heritage digital now connects with three aspects that associates with digital aspects, tangible aspects, and intangible aspects towards the community and tourists (Abd Rashid et al., 2020). The adoption of Tangible Digital Tourism Heritage serve to identify the ecotourism clusters as best practice for ecotourism and conservation management. Among the things that can be done is by eveloping "virtual tourism" projects, that will lead to a wide accessibility of cultural heritage, involve the people, landscape, urban and architectural design (Minucciani & Garnero, 2015). It is also important to recognize that the use of digital technology is not a replacement for cultural heritage itself; rather, it is a medium for heritage communication as well as a support for and complement to visitors' experience of heritage (Guo and Zhuang, 2017; Li, 2010). The combination of humanities and technical skills make the heritage tour experience more interesting and meaningful. Finally, this research has established a significant opportunity to tap the Tangible Digital Tourism Heritage at ecotourism and heritage sites to support the tourism sector for the recovery especially after the pandemic.

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