The effect of hard infrastructure on perceived destination competitiveness: The moderating impact of mobile technology

Wei Chiang Chan\textsuperscript{a}, May Chiun Lo\textsuperscript{a,}\textsuperscript{*}, Wan Hashim Wan Ibrahim\textsuperscript{b}, Abang Azlan Mohamad\textsuperscript{a}, Mohamad Kadim bin Suaidi\textsuperscript{c}

\textsuperscript{a} Faculty of Economics and Business, Universiti Malaysia Sarawak (UNIMAS), 94300 Kota Samarahan, Sarawak, Malaysia
\textsuperscript{b} Faculty of Engineering, Universiti Malaysia Sarawak (UNIMAS), 94300 Kota Samarahan, Sarawak, Malaysia
\textsuperscript{c} Chancellery, Universiti Malaysia Sarawak (UNIMAS), 94300 Kota Samarahan, Sarawak, Malaysia

\textbf{ARTICLE INFO}

\textbf{Keywords:} Transportation, Accommodation, Telecommunication, Technology adoption theory, Ecotourism, Physical infrastructure, Perceived destination competitiveness

\textbf{ABSTRACT}

Hard infrastructure is an important topic to research because of its importance to perceived destination competitiveness. Besides, tourism suppliers who adopt mobile technology can improve visitors’ trip experiences. Moreover, Malaysia, is experiencing declined destination competitiveness ranking and poor hard infrastructure development in Sarawak. The primary goal of this research is to examine the hard infrastructures as determinants of perceived destination competitiveness and the moderating effect of mobile technology from the visitor’s perspective. A total of 190 valid data were collected for further analysis. The data were analyzed using PLS-SEM approach. The result revealed that transportation and accommodation have a significant relationship with perceived destination competitiveness. Additionally, the relationship between telecommunication infrastructure and perceived destination competitiveness is moderated by mobile technology. The current study’s findings aided scholars and practitioners by providing useful data backed up by empirical evidence on the moderating effect of mobile technology and the direct relationship between infrastructure and perceived destination competitiveness.

\section{1. Introduction}

Tourism activities affect the economy, the natural and built environment, citizens, and visitors in a variety of ways. Measuring destination competitiveness has become a popular topic in the tourism business in the era of globalization. Countries are investing more in the development of destinations as a result of the tourism sector’s strong success in the global economy (Zehrer, Smeral, & Hallmann, 2017). The whole experience of the trip is one of the most important factors that travelers evaluate before choosing a destination. As a result, a competitive tourism destination pays attention not just to its attractions but also to other supporting sectors such as infrastructure, transportation, and hospitality (Chambers, 2010; Fernández, Azevedo, Martín, & Martín, 2020; Kozak & Rimmington, 1999).

Ecotourism is a subcategory of sustainable tourism that focuses on environmental, social, and economic well-being. It focuses on visiting natural destinations in order to sustain the environment, ensure the well-being of local communities, and involved in education (Joyner, Lackey, & Bricker, 2018). Furthermore, the Malaysian government is actively encouraging ecotourism as it is rapidly growing in importance as a source of revenue and employment for people who live in rural areas (Abdurahman et al., 2016). Sarawak’s government likewise places a premium priority on promoting ecotourism destinations over shopping destinations (Thomas, 2020). Sarawak is well-known for its biodiversity (Ling & Julia, 2012). As a result, national parks, wildlife sanctuaries, and nature reserves were established with the goal of conserving Sarawak’s biodiversity and environmental assets (Said, Shuib, Ayob, & Yaakub, 2013).

Infrastructure is critical to the growth of a destination’s competitiveness. Infrastructure development and improvement must be ongoing in order for a destination to remain competitive (Mustafa, Omar, & Mukhiah, 2020). When visitors travel to a destination, they require a variety of infrastructures, including transportation to get from one location to another or for sightseeing, accommodation for resting, telecommunication to communicate with locals or family and friends back home, and a variety of other infrastructures. The appeal of a