



TRAVELLERS' SATISFACTION ON THE APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN MALAYSIA'S TOURISM AND HOSPITALITY INDUSTRY.

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ABSTRACT

Artificial intelligence (AI) is perceived as being able to transform tourism and hospitality industry's operations into a greater efficiency and cost-effectiveness while offering travellers unique experiences. This study examines travellers' satisfaction of AI applications, specifically through e-Hailing, e-Wallet, e-Gate and e-Visa in the tourism and hospitality industry in Malaysia. Quantitative research approach was adopted in the current study. Data was gathered from 200 respondents using self-administrative questionnaires. Local and foreign travellers of age 18 and above who had past travel experience were chosen as samples. The findings indicated that e-Hailing, e-Gate and e-Wallet significantly influence travellers' satisfaction. However, the outcome shows that e-Visa application has no relationship with travellers' satisfaction. This study helps to strengthen the tourism ministry's current initiatives in boosting the tourism and hospitality industry in Malaysia. The outcome of the study might be of interest to the policy makers and regulators to improve on the applications of AI in tourism and hospitality in Malaysia.

Keywords: *Travellers Satisfaction, Artificial Intelligence, Tourism and Hospitality*

RESEARCH HIGHLIGHTS

1. This study has confirmed that applications of artificial intelligence in relation to e-hailing, e-wallet and e-gate have contributed towards the travellers' satisfaction.
2. The outcome of this study has confirmed that applications of AI in relation to e-hailing, e-wallet and e-gate have contributed towards the travellers' satisfaction. Travellers would have a great experience if the e-Hailing service provided is at a high standard.
3. Travellers were satisfied on use of e-Wallet's application since it involves cashless payment avoiding the risk and hassle of carrying too much cash.
4. The results of this study justified that, there is significant relation between e-Gate and travellers' satisfaction. Travellers were delighted with the experience when they used self-service e-Gate.
5. E-visa does not have any significant towards travellers' satisfaction.

Research Objectives

The applications of artificial intelligence in Malaysia's tourism and hospitality industry are still on the developing stage, where the country is moving forward to the evolution of the Fourth Industrial Revolution and 5G network connection. It requires vast amount of investment in terms of money, time, and efforts to embrace the trend of digitalization in tourism industry. Moreover, the integration of artificial intelligence towards various sectors such as transportation, hospitality, payment and immigration are still questionable whether it would directly influence travellers' satisfaction. Even though several studies have been conducted to assess tourist satisfaction in Malaysia (Omar and Mahmmod, 2013; Sukiman et al., 2013) but there is still inadequate research done in the area of information and communication technologies. Hence, the current study proposed to examine the

travellers' satisfaction on the applications of artificial intelligence specifically e-gate, e-visa, e-wallet and e-hailing. The findings of this research could provide an insight and better understanding on the applications of artificial intelligence in tourism and hospitality industry. It could be used as a reference for the Ministry of Tourism to boost the tourism and hospitality industry in Malaysia.

Methodology

A quantitative research design has been adopted in this research. The targeted population are the local and the foreign travellers, age 18 and above and a total sample of 200 respondents was selected in this study. The research tool used in this study is questionnaire. The self-administered questionnaires were distributed in Klang Valley and to a large group of people electronically through social platform. Convenience sampling technique was adopted. It is an easy way to collect data from the population members who are conveniently available to participate in this study. The questionnaires were drafted in English language and consists of two sections. In Section A, demographic questions were asked. Section B is the construct measurement of four variables to be tested in this research. The questions were designed in the form of five-point Likert Scale and the respondent should rate each of the statement that represent his or her opinion the most. A pilot study of 30 respondents were conducted. Overall, all of the variables have $\alpha > 0.6$ and were accepted in this study.

Results

Based on the 200 respondents, 53.5% were male and 46.5% were female. The respondents consisted of 138 respondents in the age group 18-30-year-old, 38 respondents in 31-40-year-old and 13 respondents in 41-50-year-old. Meanwhile 11 respondents in 51 year and above age group. The respondents graduated from different education level, 13 respondents from secondary school, 125 respondents from tertiary education, 51 respondents are master, and 11 respondents are professionals. Most of the respondents were being employed which accounted for 70.5%, 15.5% are students, 9% are self-employed and 5% are retirees.

Reliability analysis was conducted to determine the internal consistency of measurement items used in the questionnaire. Overall, all of the variables have $\alpha > 0.6$ and were accepted in this study. A multiple linear regression was conducted to determine the factors that make the most contribution in travelers' satisfaction. The value of R Square explained that 61.4% of variation in travelers' satisfaction was influenced by the four independent variables. The multiple regression model examines the relationship between e-hailing, e-wallet, e-gate, e-visa towards travellers' satisfaction. The results show e-hailing, e-wallet and e-gate have positive relationship with the travellers' satisfaction. However, e-visa shows insignificance relationship towards the travellers' satisfaction.

Findings

This study examines the four factors ie e-gate, e-visa, e-hailing and e-wallet which are likely to influence travellers' satisfaction in Malaysia tourism and hospitality industry. The findings concluded that three factors, namely e-hailing, e-wallet and e-gate influenced the travellers' satisfaction. However, e-visa does not have any significant towards travellers' satisfaction. The results could be a useful reference for Tourism Malaysia to improve on the applications of AI to boost the tourism and hospitality industry in Malaysia. The ministry should look into the various methods or ways to enhance and promote the applications of these electronic system to boost the tourism and hospitality industry in Malaysia.

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Author's Biography



Tung Soon Theam, is currently under the employment of Universiti Tunku Abdul Rahman (UTAR), Faculty of Management as an assistant professor. He obtained his MBA qualification from University of Strathclyde, UK, He is a Chartered Accountant (M) and CGMA. He also possess a LLB degree from University of London and a Certificate of Legal Practice (M). Tung has more than 20 years of industry experience. He has been lecturing in UTAR for more than 16 year in the areas of Corporate Governance and accounting related subjects. He is the co-author of the paper "Islamic Micro Financing: Crowd-Funding as a Drive to Improve Financial Inclusion in Malaysia".



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