UNIVERSITI TEKNOLOGI MARA

A CASE STUDY ON THE ADOPTION INTENTION OF NEAR FIELD COMMUNICATION (NFC) ENABLED MOBILE PAYMENT AMONG CONSUMERS IN FACULTY OF COMPUTER AND MATHEMATICAL SCIENCES, UITM SHAH ALAM AND TOUCH 'N GO, BANGSAR SOUTH

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ABSTRACT

With the introduction of new technologies like the Near Field Communication (NFC), payment today can be done very easily and conveniently using any NFC enabled mobile phone. Mobile phones that support NFC can act like a smart card when presented to a contactless terminal. The majority of the newer smartphones today have a built-in NFC chip. Mobile phones would become "wallets", or more accurately, allow users to make payments without physically having to carry cash or credit cards anymore. Although the potential of NFC Mobile Payment (NMP) system is tremendous, yet its use is still not widespread and popular. In general, the mobile payment system allows the users to pay for the goods and services purchased using their own mobile phones anytime and anywhere. NMP technology was expected to take the world by storm. Hence, merchants, stakeholders and banks have commenced plans to join the race of providing this technology to their consumers. From the end user point of view, these are expected to bring improved convenience and functionality and will eventually replace plastic cards (for payment, ticketing, transport, etc.). The purpose of this study is to identify factors that affect the adoption intention of NMP among Malaysian consumers and gather on the insights regarding the perceived motivations and concerns towards NMP. The adoption intention here is referring to individual's readiness to perform a given behavior, in this case, to adopt to NMP. There are two models used in the study which are the Technology Acceptance Model (TAM) and Diffusion of Innovation Theory (DOI). The study used the questionnaire method to perform a quantitative survey at two locations, which are Faculty of Computer and Mathematical Sciences (FSKM) at Universiti Teknologi MARA (UiTM) Shah Alam, and Touch 'n Go Sdn. Bhd. (TNG) at Bangsar South. There were nine independent variables tested in the hypothesis, which are the perceived usefulness, perceived ease-of-use, compatibility, perceived cost, additional value, personal innovativeness, nfc-related knowledge, concerns on theft/fraud/loss and consumer trust. The results are analyzed using the Statistical Package for the Social Sciences (SPSS) and resulted with two hypothesis accepted by both studies, which are compatibility and perceived cost, three hypothesis accepted by either one of the study only, which are the perceived usefulness, perceived ease-of-use and personal innovativeness, while the remaining four hypothesis were rejected by both studies, which are the additional value, nfc-related knowledge, concerns of theft/fraud/loss and consumer trust. This study has concluded that with a different demographic profile between the two groups can result in a different outcome. Further studies are suggested with a bigger number of respondents and demographic coverage to research on the factors that impact the adoption intention on using NMP in Malaysia.

Keywords: Adoption Intention; Near Field Communication; NFC Mobile Payment; Technology Acceptance Model; Diffusion of Innovation Theory.

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