Adoption of Short Messaging Service (SMS) in Malaysia

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ABSTRACT

Short Messaging Service (SMS) being an almost instantaneous communication medium that connects people is now a phenomenon that has grown and spread around the globe at an amazing speed. Given the current trend of SMS usage and its potential growth, this article provides an insight into SMS adoption. The study attempts to delineate the demographics and usage profile of SMS users in Malaysia, as well as explaining the factors influencing SMS adoption in Malaysia by using a modified version of the Technology Acceptance Model (TAM), which was originally introduced by Davis (1989). The study presents the demographic and usage profile in terms of gender, age, occupation, monthly personal income, extent of SMS usage and so forth of 489 SMS users from four institutions of education in the Klang Valley and Selangor. The present research uses and validates the scales for variables developed by earlier studies, namely perceived usefulness, perceived ease of use, perceived enjoyment, and perceived fees, which are hypothesized to be fundamental determinants of behavioural intention. The scale items for the said variables were tested for reliability, correlation and regression. The application of correlation analysis reveals a significant relationship among the independent variables, namely, perceived usefulness, perceived enjoyment, and perceived ease of use with the dependent variable that is behavioural intention. With regards to the level of importance derived from regression analysis, usefulness ranks the highest, followed by ease of use and enjoyment in explaining SMS adoption in Malaysia. Perceived fees do not seem to have a significant relationship with behavioural intention. Some implications, limitations and recommendations for future research are also discussed.

Keywords: Adoption, M-Commerce, Short Messaging Service (SMS), TAM model

1. INTRODUCTION

SMS is a very important instant communication tool that can be used to serve several purposes. SMS can be used by businesses for advertising and promotion by which they can obtain instant feedback about their products. Also, governments can use it to communicate interested issues with the people as well as for conducting elections (SMS voting). Furthermore, the high number of opportunities to use creative and innovative marketing activities, as highlighted by Haghirian, et al., (2008) in mobile commerce (m-commerce), implies that marketers need to gain insights into relevant issues of consumer behaviour in the SMS context. Also, SMS banking is another application of mobile technology, which was investigated by Amin (2007) who

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conducted an analysis of mobile credit card usage intention in the Malaysian context.

M-commerce, a natural extension to electronic-commerce, includes any business activity conducted over a wireless telecommunication network, which includes B2C and B2B commercial transactions as well as the transfer of information and services via wireless mobile devices, especially in intra-business (Turban, 2006). Similar to other e-commerce applications, m-commerce can be done via the Internet, via private communication lines or over other computing networks. Currently, wireless devices used in mobile commerce include two-way pagers/short messaging service (SMS), wireless application protocol (WAP)-equipped cellular phones, personal digital assistants (PDA), Internet-enabled laptop computers with wireless access capacity and so forth.

Comparing the three platforms of m-commerce, namely, WAP, GPRS and SMS, SMS is the most popular platform and it was discovered that the use of the short messaging service (SMS) has exceeded all initial expectations (Bauer et al., 2005). This has indirectly resulted in mobile phones being used as an important market instrument compared to other mobile devices. SMS popularity is mainly due to its cost as it is the cheapest information delivery mode. Studies by the Malaysian Communications and Multimedia Commission (MCMC) found that, in Quarter 1, 2006, Malaysia ranked second with 56.6 persons owning a mobile phone per 100 inhabitants in comparison to other ASEAN countries (Communication and Multimedia, 2006). The growth of SMS-related services over the past several years reflects the enormous potential of the Malaysian wireless data communication market. This study is, therefore, timely to elucidate the rationale behind the adoption of SMS as a form of communication.

The Short Messaging Service (SMS) is generally understood as text read on small mobile phone screens, typically capable of presenting 15 to 20 characters per line. The messages are written with a numeric keypad on the phone, normally requiring more than one key press per character, with messages restricted to 160 characters in length (Svendsen et al., 2006). It has been classified as a form of communication service within mobile commerce, grouped together with voice call, MMS, video and e-mail (Harris et al, 2005) that allows people and organizations to send and receive short text messages from a mobile phone in near real time. SMS, is an almost instantaneous communication medium that connects people and is now a phenomenon that has grown and spread around the globe at an amazing speed compared to other types of mobile commerce services. SMS is extensively used, not only for communication purposes, but also as a major marketing effort due to its low cost. As a highly interactive medium, SMS enables the recipient of the message to reply to it immediately, which establishes a direct dialogue between the advertiser and the potential customer. This enables companies to offer personalized, timely and relevant information, which in turn strengthens both the customer relationship and the emotional relationship between a brand and its customers (Nysveen et al., 2005). SMS owes its popularity to its low cost mode of information delivery and its instantaneous communication medium, which operates on a “store and forward concept”. With the increased number of mobile subscribers in the world, SMS has gained its popularity and become an integral part of people’s lives (Pastore, 2002 quoted in Lai, 2004), and has significant implications for communication and information transmission. This study will attempt to answer the following research question. What are the factors that influence the adoption of the short messaging service? Based on the aforesaid research question, the following objective is developed; to determine factors influencing the adoption of the short messaging service.

2. ADOPTION OF SMS

Previous studies have examined ways in which everyday life activities influence mobile phone use and to a certain extent SMS usage (Harris et al., 2005; Gilligan & Heinzmann, 2004; Davis,
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