

# Chapter 15

## Empirical Study of Single Platform E-Payment in South East Asia

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### **ABSTRACT**

*Freedom, choice, and simplicity brought about by the e-commerce and technologies are creating the next internet and mobile wave. The single platform e-payment interactions have emerged in the consumer-centric world. The combination of evolving business drivers, globalization, downsizing, changing customer demands, and the evolution of enabling technology is constructing the customer-centric e-payment solutions. In this chapter, the authors discuss and analyze the e-commerce payment systems with the focus on single platform e-payment. This chapter presents an empirical study of e-payment systems and the implications of the findings on e-payment systems in Southeast Asia. Marketing and management personnel of the e-payment organizations will be able to utilize the study information for developing products and services that encourage the usage of single platform e-payment.*

### **INTRODUCTION**

There is an increasing interest in this topic given the problems such as inconvenience, not interesting and unattractiveness of E-payment technology solutions faced by organizations to increase consumers' intention to use E-payment systems (Lai, 2007: 2014; 2016: 2017; 2017; Geron, 2009, Wei, Shuo, Luo, Chen and Ling, 2011; Jovanovic and Organero, 2011; Shuaibi and Muhammad, 2016). Therefore, this paper is addressing the problems faced by organizations through the study of the convenience, design,

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personality, easy to use, usefulness and intention to use the E-payment. The lack of empirical investigations combining the determinants of the three E-payments (Card, Internet, and Mobile) in one study encourages the study of the single platform E-payment system and this is the research gap in the literature review (Lai: 2014: 2016: 2017: 2018) and the author dominated google search engine with the keyword “Single Platform E-payment”.

Previous research and study have covered the design, convenience, perceived usefulness, perceived ease of use and intention to use the single platform E-payment (Lai: 2014; 2016; 2017; 2018; Lai and Zainal, 2015; Lai and Scheele, 2017). This study focuses on consumers-based research orientation such as consumers’ intention to use that is measurable with the adoption and extension of Technology Acceptance Model (TAM) (Davis, Bagozzi and Warshaw, 1989) into the stimulus research model (Lai: 2014: 2016: 2017: 2018) to enhance the potential of deploying an integrated single platform E-payment system with personality. Personality is the factor with characteristics that might influence the consumers’ intention to use the single platform E-payment and is another gap in the literature. Therefore, this study seeks to investigate the convenience, personality, and design that influence perceived ease of use and perceived usefulness. Furthermore, this study investigates the relationship between perceived ease of use and perceived usefulness with consumers’ intention to use one single platform E-payment System.

Another objective of this study is to conduct data splitting. Data splitting is the act of partitioning the available data into two different portions and it is usually for cross-validatory purposes (Picard & Berk, 1990). One portion of the data is used to develop a predictive model while the other to evaluate the model’s performance. From this, the researchers hope to point out any discrepancies in the model performance.

## **THEORETICAL MODEL**

Technology Acceptance Model (TAM) was introduced by Fred Davis in 1986. It is specifically tailored for modeling users’ acceptance of information systems or technologies or new product acceptance. The goal of Davis (1989) TAM is to explain the general determinants of technology acceptance that lead to explaining users’ behavior across a broad range of end-user computing technologies and user populations. In this study will base on Technology Acceptance Model that was formed by Venkatesh and Davis (1996) after the main finding of both perceived usefulness and perceived ease of use were found to have a direct influence on behavior intention, thus eliminating the need for the attitude construct. The two significant beliefs exist in the TAM are the perceived usefulness and perceived ease of use. TAM also postulates that perceived ease of use stimuli perceived usefulness because the easier to use a single platform E-payment system, the more useful users perceive the single platform E-payment system to be. There are empirical studies of the TAM include this correlation and the finding share a significant relationship between these two factors (Moon and Kim, 2001; Van der Heijden, 2003; Shih, 2004).

## **Factors Influencing the Single Platform E-Payment**

Factors influencing the single platform e-payment in this study are personality, design, and convenience. In this study, personality is a new factor. Thus, an in-depth literature review is being discussed here as the rest of the factors are being studied in previous research papers for e-payment. Marketers believe that personality is the factor that wills stimulus the intention to use the single platform e-payment that

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