Chapter 12
Privacy Concerns and Smartphone App Purchase Behavior in Malaysia

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ABSTRACT

The online privacy concerns remain a top priority for every smartphone users, specifically those involved in mobile purchase activities. Studies showed that it is an important factor that affects attitude and intention to purchase smartphone apps. Although there are significant number of theories and research on the effect of privacy concerns on purchase intention in the general concepts on information systems and e-commerce, there is little evidence if the results of these findings still hold true in the mobile technology context. The objective of this chapter is to investigate the issue of privacy concerns on the attitude and purchasing intention among Malaysian smartphone users. This chapter investigates the role of privacy concerns in influencing the decision-making process. The chapter provides significant insights on the issue of privacy concerns in the usage of smartphones which can help developers such as Google and Apple to improve their apps stores to provide better protection for users’ privacy and security in Malaysia.

INTRODUCTION

As more consumers embrace the rise of the Internet era, the online privacy concerns remains a top priority for every smartphone user (DMA, 2015). Many companies find it difficult to ensure privacy and security on their apps for their users to use and engage in a successful transaction, especially where cybercrimes are fast increasing. Privacy concerns naturally become an important issue as e-commerce makes it ascent into an important business aspect of most organizations. This is due to the fact that marketers are collecting more information on customers who are buying online to study not only their characteristics, but also their purchase preferences and behaviors. These concerns have proven to have negative consequences for the adoption of e-commerce (Sheehan & Hoy, 1999; Cho et al., 2009). In Malaysia alone, it was reported by Malaysian Communication and Multimedia Communication agency (MCMC) that the country has a 35% of smartphone penetration, resulting to more than 10 million smartphone users. It

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Privacy Concerns and Smartphone App Purchase Behavior in Malaysia

is even predicted that smartphone penetration in Malaysia will rise to 60% by 2015. The statistics also reveals that Malaysia holds a 66% of Internet users from the population, with 60% internet penetration and 140% mobile penetration, with 47% of Malaysians own more than one mobile phone (MCMC, 2014; Euromonitor, 2014). Of the current smartphone users, 50.9% of them have installed 10 to 30 apps in their smartphone (MCMC, 2014). The Wall Street Journal examined 101 popular smartphone apps and found out that, 56 apps transmitted the phone’s unique identifiers to other companies without users’ awareness, while about 47 apps transmitted the device’s location to outsiders (Thurm & Kane, 2010; Angwin & Valentino Devries, 2011). Furthermore, the study revealed that both Apple iOS and Google Android mobile operating systems regularly record and transmit location data without the consent of phone owners. These findings represent concerns regarding users’ information privacy, especially when MCMC stated that most Malaysian smartphone users tend to opt for “jailbreak” smartphones that allow the downloading of apps that have not been approved by app stores as these apps may impose security and data integrity risks (MCMC, 2014). As it is, the increase number of smartphone users will only lead to increasing privacy risks (Al-Hadadi & Al Shidhani, 2013; De Cristofaro, 2011).

In addition to these alarming statistics, the lack of academic research on the influence of privacy concerns on consumers’ intention to purchase smartphone apps still represent a significant gap, especially when including other influential factors that affect the decision to purchase apps such as the stimulus of social influences and one’s own perceived ability to perform the behavior. Although there are significant number of theories and research on the effect of privacy concerns on purchase intention in the general concepts on information systems and e-commerce (Dai et al., 2014), there is little evidence if the results of those research still hold true in the mobile technology context (Lai & Lai, 2014, Belkhamza & Niasin, 2017). Known past studies have lacked the attempt and initiative to investigate and examine the role of privacy concern on smartphone apps purchase intention by integrating a theoretical predictive consumer behavior framework such as the Theory of Planned Behavior (TPB) in the context of smartphone privacy. Several studies had used TPB on mobile devices related topics, although they do not explicitly studied the effect of privacy concern on smartphone apps purchase intention (Khalifa & Shen, 2008; Yang, 2012).

On this regard, the objective of this chapter is twofold. The first objective is to investigate the issue of privacy concerns on the purchase intention of smartphone apps. More precisely, the aim is to give further insights on the issue of privacy concerns in the usage of smartphone apps stores which can help developers such as Google and Apple to improve their apps stores to provide better protection for users’ privacy and security in Malaysia. Secondly, the chapter aims to provide a better understanding on the role of privacy concerns and perception towards the purchase or usage behavior among Malaysian smartphone users through the utilization of TPB as the roles of perceived behavioural control and subjective norm are also taken into consideration.

LITERATURE REVIEW

Concept of Privacy Concerns

Privacy has long been identified a moral right (Corlett, 2002). As far as technology is concerned, Laudon & Traver (2001) defined it as “the moral right of individuals to be left alone, free from surveillance or interference from other individuals or organizations, including the state”. More specifically, it is the concerns of users on the collection, usage and manipulation of personal information by firms or entities due to the fear of loss or threat or breach of privacy. This definition is tailored toward its information