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# Individual Users' Adoption of Smart Phone Services

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## ABSTRACT

This study plans to investigate factors that influence individual users' adoption of smart phone services. A research model is developed based on Technology Acceptance Model (TAM) and Diffusion of Innovations Theory to include utilitarian, emotional, personal and social factors. Drawing from previous studies, we propose that there are direct and indirect influences among personal innovativeness, social influence, perceived ease of use, perceived enjoyment, perceived usefulness and eventually intention to adopt smart phone services. The model will be empirically tested with a survey. Theoretical and practical implications are discussed.

## Keywords

Smart Phone Services, Technology Adoption, Technology Acceptance, TAM, Diffusion of Innovations Theory

## RESEARCH SUMMARY

Smart Phones (i.e. iPhone and Blackberry) are the next generation mobile phones that have become popular today. The term smart phone is used to characterize a mobile phone with special computer enabled features. Smart phone service(s) is defined as a mobile telephone set which provides special computer enabled features. Such features including wireless email, Internet access, Web browsing, personal information management, entertainment, and many other diverse applications. The use of general mobile phone services including voice and text communications has been highly diffused in our daily life, but the use of smart phone services including various computer enabled applications is still on its way.

In the Information Systems (IS) field, individual users' IT/IS adoption has been studied in organizational contexts. There are abundant studies that empirically investigated determinants of IT/IS adoption decisions and usage (Davis 1989; Moore et al. 1991; Taylor et al. 1995; Venkatesh et al. 2000). Adoption refers to making a decision to use a particular IT/IS. In our study, it refers to using smart phone services. Why individual users adopt IT/IS for their own usage is understudied, although there have been several studies on users' intentions for adopting

mobile services based on Davis's Technology Acceptance Model (TAM) (Rao et al. 2007).

This research focuses on not the adoption of smart phone devices but the adoption of smart phone services – the smart phone services mean the Internet enabled services based on the data plans from mobile service providers. There can be numerous factors influencing people's adoption of smart phone services. According to TAM, if users believe that smart phones services are complicated to use, they may not want to use them, but if they believe smart phones services are useful for their own purposes despite technical complexities, people will want to use them. Also, since the smart phones and the services provide various entertainment-related applications, the joyfulness of smart phones and services would be a good reason for people to adopt them. Therefore, the perceived enjoyment would be an important factor to influence people's adoption of smart phone services.

In addition to above mentioned factors, there are other factors that indirectly or directly affect individuals' intentions to adopt smart phone services. These factors include social factors and personal factors. People may be influenced by perceived pressures from their social networks. A number of recent technology acceptance studies incorporated social influence construct into their operational models and found some empirical support (Taylor et al. 1995; Venkatesh et al. 2000; Venkatesh et al. 2003). Also, personal innovativeness would be another factor for individuals' adoption of smart phone services. Agarwal and Prasad proposed personal innovativeness in IT and illustrated its effect on the antecedents as well as the consequences of individual perceptions about a new IT (Agarwal et al. 1998).

This study attempts to fill the above identified gap in the literature. Specifically, we investigate to what extent the various types of factors listed above may influence individual users' adoption of smart phone services. In this research-in-progress paper, we review related literature, provide theoretical background, define these factors, articulate their relationships, and develop corresponding hypotheses. We will briefly outline our plan for an empirical study to test the research model.