Chapter 3

Examining Behavioral Intention Toward Mobile Services: An Empirical Investigation in Greece

Theodora Zarpou
University of Macedonia, Greece

Vaggelis Saprikis
University of Macedonia, Greece

Maro Vlachopoulou
University of Macedonia, Greece

ABSTRACT

This study presents a conceptual model that combines perceived ease of use, perceived usefulness, innovativeness, trust, demographic characteristics and relationship drivers in order to examine their influence on the mobile services’ adoption intention. The proposed model is empirically tested using data collected from a survey with questionnaires conducted in Greece. The results are analyzed through factor analysis, stepwise regression analysis, and ANOVAs. The findings show that individuals’ innovativeness, their educational level, and the relationship ties between the users and the mobile services are key factors to encourage m-services’ adoption. The results provide interesting insights and useful hints to practitioners and researchers.

INTRODUCTION

The transition from the cabled internet and the electronic services to the wireless internet and the mobile services is a fact. Thanks to the progress of the wireless communication technologies and devices (smartphones, PDAs, Palmtops, etc.), there is an increasing interest from both the industry and the public sector in exploring the expanding possibilities of their businesses or the betterment in the fulfillment of the individuals’ every day needs.

The mobile data services mainly refer to the communication services (e-mails, SMS, MMS,
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etc.), web information services (weather information, sports, banking information, news, etc.), database services (telephone directories, map guides, etc.), entertainment (ringtones, videos, games, etc.) and commercial transactions through the mobile devices (buying products, making reservations, banking, stock trading, etc.) (Lu, Yao, & Yu, 2005).

A basic research question is whether these services are worth being used by the wide part of the population or not. A first impression would be that they are quite popular since the statistics show that the mobile phones in Greece have a high penetration degree (146%) (Athens University of Economics and Business & ICAP GROUP, 2008). Surveys show, however, that in spite of the high penetration rate, 4 out of 5 Greeks have never used any of the aforementioned services, whereas the majority of the users seldom utilize such services (Information Systems Technologies Lab [IST LAB], 2007). So, it is a big challenge to find those specific attributes of the mobile services that still keep them rather unpopular in Greece given the wide adoption of mobile devices. It is an even bigger challenge, though, to find possible solutions and make suggestions regarding the set of factors that affect their adoption. The aim of the paper is to find out users’ reaction towards different parameters that would influence the individual’s intention to use the mobile services in the current Greek reality.

There are several behavioral intention theories. The most popular and widely used ones are following. The **Diffusion Of Innovations (DOI)** perspective is introduced by Rogers (1995) investigating a variety of factors which are considered to be determinants for the actual adoption and usage of Information Systems. According to DOI, potential adopters evaluate an innovation based on innovation attributes (relative advantage, compatibility, complexity, trialability and observability) (Rogers, 1995). The **Theory of Reasoned Action (TRA)** was first proposed by Fishbein and Ajzen (1975) and it supported that users’ intention to adopt a technology is determined by two factors: personal in nature (attitude) and social influence (social or subjective norm). TRA was later evolved to the **Theory of Planned Behavior (TPB)** by adding perceived behavioral control to the initial determinants (Ajzen, 1991). The TPB was also enriched with stable, decomposed beliefs structures for the TPB model and proposed the Decomposed Theory of Planned Behavior (Taylor & Todd, 1995). Finally, the **Technology Acceptance Model (TAM)** indicates that perceived ease of use and perceived usefulness are the two main beliefs that determine one’s intention to use technology (Davis, 1989). The most recent one, however, is the **Unified Theory of Acceptance and Use of Technology (UTAUT)**. Venkatesh, Morris, Davis, and Davis (2003) combined eight models (the above theories’ models plus a few of their extensions) in a unified technology acceptance model, which contains five determinants (performance expectancy, effort expectancy, social influence, facilitating conditions, and behavioral intention). It is used so far for a number of technology types such as e-government (Alawadhi & Morris, 2008), wireless LAN (Anderson, & Schwager, 2003) and m-commerce (Pedersen, Methlie, & Thorbjornsen, 2002).

Although TAM is negatively criticized by a team of researchers, it compares favorably to TRA and TPB (El-Kasheir, Ashour, & Yacout, 2009). When deeper explanation of user adoption intention is desired, it allows other factors to be incorporated easily into its basic model (Hong, Thong, & Tam, 2006). Hence, in the current study, we keep the basic variables of TAM- perceived ease of use, perceived usefulness and behavioral intention- and through literature research we contribute with new variables- trust, innovativeness, relationship drivers and demographics- which are expected to have influence on the mobile services adoption intention, especially in the Greek area. All these constructs in this paper, are defined in