

# Chapter 80

## Role of Personal Innovativeness in Intentions to Adopt Mobile Services: Cross-Service Approach

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### INTRODUCTION

Because only a fraction of new service ideas are successful, and due to the turbulence and dynamics in mobile business markets, a thorough understanding of factors underlying mobile service adoption decisions is necessary. Use of mobile communications has been increasing extensively (Watson et al., 2002). Today, an extensive selection of mobile services is available to consumers. However, consumers use mobile devices mainly for simple services, like text messaging (Nysveen et al., 2005a). In order to better understand the acceptance of mobile services, it is necessary to study behavioral intentions (i.e. antecedents of actual adoption behavior) of consumers adopting new mobile services.

Consumer adoption behavior as a research topic has been given considerable notice, and several models have been provided to explain the behavioral intentions related to innovation adoption – also in the field of mobile communications. The background for these models exists in different fields of research and the theory base is rich: like the theory of planned behavior (TPB), technology acceptance model (TAM) and the diffusion of innovations (DOI) theory. Although these models have been useful in explaining behavioral intentions, several extensions have been proposed as it has been suggested that these basic models are too parsimonious. The present study follows this notion, and highlights the role of personal innovativeness in predicting consumers' adoption intentions. Personal innovativeness describes partly the personality of consumers, but is also attached to the technological

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domain. Personal innovativeness thus captures attitudinal influence toward adoption behavior, and may play a significant role in predicting adoption behavior.

The proposed model is based on TPB, TAM and DOI models as it investigates usage intentions via three overall influences: attitudinal influence (innovativeness), motivational influence (status image), and perceived control (willingness to pay). As mobile services differ in their characteristics (Hoffman & Novak, 1996), customers' intentions should be studied across service categories. Additionally, innovativeness should be seen as an individual characteristic which is invariant across different types of technology (Schillewaert et al., 2005). A cross service approach was chosen and the focus is on three sets of mobile services: mobile entertainment services, mobile services for everyday activities, and mobile notification services.

The purpose of this article is to contribute to the research on behavioral intentions to use mobile services. Key role is attributed to innovativeness in predicting mobile service adoption. The present study follows Nysveen et al.'s (2005a) proposition and integrates and updates TPB, TAM and DOI models. We hope to be able to provide a more nuanced understanding of consumers' motives for using mobile services by (1) studying motivational and attitudinal influences and consumers' perceived control, and (2) by studying the issue across three different mobile service categories. Additionally (3), we pay attention to the dual role of hardware (mobile phone) characteristics in adoption of related software (mobile services).

## **BACKGROUND**

The theory of planned behavior (Ajzen, 1985), technology acceptance model (Davis, 1985) and the innovation diffusion theory (Rogers, 1983) are perhaps the most often applied models in predicting adoption behavior, as they provide a

good starting point in investigating individual-level factors affecting the adoption of last-mile technology (Oh et al., 2003). Comparison of these theories (Figure 1) reveals that TPB and TAM both focus on predicting behavioral intention and actual behavior, whereas DOI and TAM share in common innovation related perceptions that are formed by the individual, and which are critical for the innovation adoption. Thus, further focus is given on three sets of variables: attitudinal, motivational and behavioral.

### **Attitudinal Influences: Personal Innovativeness**

Literature in marketing suggests that a key success factor of new product introduction is identification of those people who are the first to buy the product or service launched into markets (Flynn & Goldsmith, 1993). It is necessary that the innovation is adopted by these first individuals who have a characteristic that has come to be known as innovativeness. Innovativeness can be seen as a psychographic characteristic of individuals. Midgley and Dowling (1978) define consumer innovativeness as the degree to which an individual is receptive to new ideas and makes innovation decisions independently of the communicated experience of others (p. 236). Yi et al. (2006) describe innovative adopters in their study as follows:

*You buy into a new product's concept very early in its life cycle. You find it easy to imagine, understand and appreciate the benefits of a new technology and base buying decisions on this belief. You do not base these buying decisions on well established references, preferring instead to rely on intuition and vision. (Yi et al., p. 403)*

Innovativeness thus reflects the consumers' openness toward new ideas and their willingness to be among the first ones to adopt innovations. Innovativeness is considered to be domain specific

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