

# Consumer Acceptance of the Mobile Internet

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## INTRODUCTION

This chapter looks at the consumer acceptance of mobile Internet services. Mobile Internet services include any Internet application that can be accessed via a handheld mobile device (such as a cellphone, a smartphone or a personal digital assistant), using mobile network technology (such as 4G LTE, Wi-Fi). Early forecasts for the diffusion of the mobile Internet and mobile commerce (i.e., using the mobile Internet to make commercial transactions) worldwide were overoptimistic. Jarvenpaa, Lang, Takeda, and Tuunainen (2003) stated that, “it will be the innovativeness of users and uses, not the innovativeness of the technology that will drive m-commerce growth to a new level” (p. 44). Nevertheless, the introduction of Apple’s iPhone into the market in 2007 largely contributed to the increased consumer acceptance of the mobile Internet (West & Mace, 2010). Since then, more and more mobile devices that allow consumers to access the Internet at any time and at any place (this is often termed “ubiquitous”) have appeared in the market. However, there are still consumers who, for many reasons, resist using mobile Internet services. The goal of this chapter is to provide theoretical and empirical insights into both the driving factors and the barriers of the acceptance of the mobile Internet.

## OVERVIEW

Dr. Davis (Davis, 1989) at University of Arkansas is among the earliest researchers in acceptance of technology. Dr. Venkatesh (Venkatesh, Morris,

Davis, & Davis, 2003) at University of Arkansas contributed to theory testing in the field and has proposed recent acceptance models that have been applied to consumer contexts of mobile Internet usage (Venkatesh, Tong, & Xu, 2012). Dr. Kleijnen (Kleijnen, de Ruyter, & Wetzels, 2007) at VU University Amsterdam, Dr. Pura (born Pihlström) (Pura, 2005) at Hanken School of Economics, as well as Dr. Nysveen, Dr. Pedersen, and Dr. Thorbjørnsen (Nysveen, Pedersen, & Thorbjørnsen, 2005) at NHH Norwegian School of Economics are among the leading experts in the area of mobile Internet consumer acceptance. In their research on consumer acceptance, they take into account the peculiarities of mobile Internet services (as described in the next paragraphs).

Most empirical research into the acceptance of mobile Internet services is based on existing theories and models of technology acceptance, such as the Technology Acceptance Model (Davis, 1989). User acceptance of PCs in work place settings was central to the early research fields in the 1980’s and 90’s: “„Understanding why people accept or reject computers has proven to be one of the most challenging issues in IS [information systems; the author] research” (Davis, Bagozzi, & Warshaw, 1989, p. 987).

To study the acceptance of mobile Internet services, however, researchers have begun to extend these models, or use different theories and models, because (1) the motives for mobile Internet usage differ from the motives for general technology or PC usage (e.g., self-expression of identity and entertainment are more important when using mobile devices), (2) the contexts for mobile Internet usage differ from general technol-

ogy and PC usage contexts (e.g., time consciousness and the degree of physical mobility affect mobile Internet usages; action/interest is often considered as a third contextual factor in mobile Internet environments), (3) the strict separation between work and leisure is disappearing, because mobile devices are always at hand and “on air;” they can thus be used for work in leisure time and vice versa, and (4) trust/risk was found to be more relevant in mobile Internet environments than in wired Internet environments (e.g., as regards security standards when using the mobile Internet and mobile Internet pricing instruments of telecommunication service providers). In what follows next, I will briefly describe these developments with the aim to provide an overview of existing evidence about consumer acceptance of the mobile Internet.

## **CURRENT SCIENTIFIC KNOWLEDGE IN THE ACCEPTANCE OF THE MOBILE INTERNET**

There is no commonly accepted theory of how individuals make usage decisions with respect to the mobile Internet. Therefore, researchers often use existing theory or conduct theory-building studies in order to explain and predict consumer acceptance of the mobile Internet. Below, I summarize the theoretical frameworks that I believe are most relevant for the research area of consumer acceptance of the mobile Internet:

- Technology Acceptance Model.
- Motivational models.
- Perceived Value models.
- Unified Theory of Acceptance and Use of Technology.
- Diffusion of Innovation theories.

However, I note that there are many more models that are not discussed in this chapter, but

may still contribute to explaining and predicting consumer acceptance of the mobile Internet (e.g., Bagozzi & Lee, 1999).

## **The Relevance of Perceived Usefulness and Ease of Use for Consumer Acceptance of the Mobile Internet as Proposed by the Technology Acceptance Model**

The central constructs of the Technology Acceptance Model are perceived usefulness and perceived ease of use of an information technology, which, in turn, influence attitude and usage intention, both directly and indirectly (Davis, 1989). Perceived usefulness refers to the performance expectancy of mobile Internet services (Davis, 1989), and perceived ease of use refers to the degree of effort that consumers associate with using mobile Internet services (Davis, 1989).

The advantages of this model are the high explanatory power of the two constructs, the parsimony, the wide applicability, and the focus on individual user perceptions. As a consequence, the Technology Acceptance Model and extensions of the model have been widely used to predict the acceptance of the mobile Internet and mobile commerce (e.g., Bruner & Kumar, 2005; Groeppel-Klein & Koenigstorfer, 2007; Kleijnen, de Routers, & Wetzels, 2004a; Nysveen et al., 2005). Perceived usefulness of the mobile Internet is evaluated positively if contextual factors are relevant for consumers, that is, if they perceive a need at a certain time, at a certain place, and if they are highly involved (action/interest) and if the mobile Internet helps individuals satisfy the need and increase performance in these contexts. Perceived ease of use describes the effort a user has to make in order to use technology; it increases with intuitive user friendliness of the mobile Internet. Venkatesh and Ramesh (2006) found that the relationship between ease of use and self-reported use of websites was stronger for the mobile Inter-

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