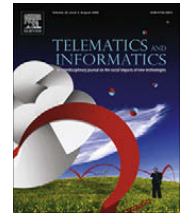




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Analysis of users and non-users of smartphone applications

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ABSTRACT

Purpose: Smartphones facilitate the potential adoption of new mobile applications. The purpose of this research is to study users and non-users of three selected mobile applications, and find out what really drives the intention to use these applications across users and non-users.

Design/methodology/approach: The authors measured actual usage of mobile applications in a panel study of 579 Finnish smartphone users, using in-device measurements as an objective way to identify users and non-users. A web-based survey was used in collecting data to test an extended TAM model in explaining intention to use.

Findings: Perceived technological barriers negatively affect behavioural control, reflecting people's assessment of themselves being capable of using the services without trouble. Behavioural control is directly linked to perceived usefulness (except for games) and perceived enjoyment, as hypothesized. Perceived enjoyment and usefulness were generically found to explain intention to use applications for both users and for non-users.

Research limitations/implications: With regards to the impact of social norms, the study finds that further research needs to be done in exploring its impact more thoroughly. The dataset of the research, consisting purely of male-dominated, young smartphone users, make the generalization of results difficult.

Practical implications: There are differences regarding what drives the usage of different kinds of mobile applications. In this study, map applications and mobile Internet, are driven by more utilitarian motivations, whereas games are more hedonic. It is also clear that not everybody are using applications facilitated by smartphones, and therefore the presented approach of studying users and non-users separately provides a new approach to analyze adoption on a practical level.

Originality/value: This research proves that models like TAM should not treat mobile services as a generic concept, but instead to specifically address individual mobile services. The research also demonstrates the unique value of combining objective usage measurements (reflecting actual behaviour) with traditional survey data in more comprehensively modelling service adoption.

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1. Introduction

Worldwide, diffusion of mobile handsets and basic mobile services, like mobile telephony and SMS (short messaging service), is reaching over 4 billion subscribers. Most of the users are using pre-paid subscriptions, representing 61% of the world

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