Chapter 5.22 User Acceptance of Mobile Services

Eija Kaasinen

VTT Technical Research Centre of Finland, Finland

ABSTRACT

Personal mobile devices are increasingly being used as platforms for interactive services. User acceptance of mobile services is not just based on usability but includes also other interrelated issues. Ease of use is important, but the services should also provide clear value to the user and they should be trustworthy and easy to adopt. These user acceptance factors form the core of the Technology Acceptance Model for Mobile Services introduced in this chapter. The model has been set up based on field trials of several mobile services with altogether more than 200 test users. The model can be used as a design and evaluation framework when designing new mobile services.

INTRODUCTION

Research on mobile services has thus far mainly concentrated on the usability of alternative user interface implementations. Small mobile devices pose significant usability challenges and the usability of the services is still worth studying. However, more attention should be paid to user acceptance of the planned services. The reason for many commercial failures can be traced back to the wrongly assessed value of the services to the users (Kaasinen, 2005b).

User evaluations of mobile services often have to be taken into the field as the service would not function properly otherwise, or it would not make sense to evaluate it in laboratory conditions. This would be the case, for instance, with GPS systems and route guidance systems. In long-term field trials with users, it is possible to gather feedback on the adoption of the service in the users' everyday lives. Such studies gather usage data beyond mere usability and pre-defined test tasks (Figure 1). Field trials help in studying which features the users start using, how they use them and how often, and which factors affect user acceptance of the service.

Business and marketing research already have approaches whereby new technology is studied on a wider scale. The Technology Acceptance Model

User Acceptance of Mobile Services



Figure 1. Taking user evaluations from the laboratory to the field makes it possible to evaluate user acceptance on new services

by Davis (1989) defines a framework to study user acceptance of a new technology based on perceived utility and perceived ease of use. Each user perceives the characteristics of the technology in his or her own way, based for instance on his or her personal characteristics, his or her attitudes, his or her previous experiences and his or her social environment. The Technology Acceptance Model has been evolved and applied widely, but mainly in the context of introducing ready-made products rather than in designing new technologies. 21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/user-acceptance-mobile-services/26644

Related Content

Going DEEP: Public, Iterative Release as a Mobile Research Strategy

Andrew Dekker, Justin Marringtonand Stephen Viller (2013). *Tools for Mobile Multimedia Programming and Development (pp. 1-17).*

www.irma-international.org/chapter/going-deep-public-iterative-release/77931

A Study of Performance Factors in the Brunel Remote Guidance System for Visually Impaired Pedestrians

Mohammed Al-Masarweh, Vanja Garajand Wamadeva Balachandran (2012). *International Journal of Handheld Computing Research (pp. 56-71).* www.irma-international.org/article/study-performance-factors-brunel-remote/73806

Handoff and Route Optimization in Mobile Networks over IEEE 802.16e

Badiea Abdulkarem Mohammedand Tat-Chee Wan (2013). *International Journal of Mobile Computing and Multimedia Communications (pp. 32-45).* www.irma-international.org/article/handoff-route-optimization-mobile-networks/78384

Mobile Data Offloading Using Opportunistic Communication and AP Deployment: A Case Study

Sanjit Kumar Dash, Sasmita Mishraand Jibitesh Mishra (2017). International Journal of Mobile Computing and Multimedia Communications (pp. 66-84).

www.irma-international.org/article/mobile-data-offloading-using-opportunistic-communication-and-ap-deployment/193260

B-POS Secure Mobile Payment System

Antonio Grillo, Alessandro Lentiniand Gianluigi Me (2009). *Mobile Computing: Concepts, Methodologies, Tools, and Applications (pp. 1237-1245).* www.irma-international.org/chapter/pos-secure-mobile-payment-system/26584