Ubiquitous Commerce for Creating the Personalized Marketplace:
Concepts for Next Generation Adoption

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Ubiquitous computing will change the way people live with technology. At the same time it will also affect the way people access and use services. It is obvious that these new ubiquitous services have a lot of business potential. However, before this potential can be fully exploited, people need to understand the crucial factors behind creating commercially successful ubiquitous services. To do so, research is needed in three important areas. Firstly, the authors need to understand the basic nature of ubiquitous services, that is, their unique characteristics. Secondly, people need to know the needs of the customers in order to create value to them so that they will accept and use ubiquitous services. This can be done by involving users into the innovation process of ubiquitous services. And thirdly, people need to understand the value creating networks developing and commercializing the ubiquitous services as well as to find an appropriate business model for describing them. Value creation is impossible without a successful network business model which is yet to be found. Thus, the aim of this chapter is to describe, examine and give proposals for further research in these three important research fields which can be seen as the prerequisites for developing commercially successful ubiquitous services.

Chapter IX

This chapter discusses a service oriented framework to realize proximity aware services for mobile devices. It describes the architecture at both client and server ends. Using the proposed framework we develop a prototype to realize a real world application. The chapter ends with a discussion on the framework and possible future enhancements.

Chapter X

In models to study technology acceptance, the empirically validated path from perceived ease of use (PEOU) to perceived usefulness (PU) is usually rationalized by the argument that the less effort it is required to use a technology, the more useful the technology is. This argument is rather generic to fully account for the relationship between PEOU and PU. In this study the authors examine the effects of the common antecedents of PEOU and PU on their relationship. The authors first extensively reviewed the literature to identify the common antecedents of PEOU and PU. We then conducted a survey of users' acceptance of some common e-learning forums such as ICQ, WebCT, and MSN. Based on variance analysis we found that user-interface design (UID) explains 43% of the relationship between PEOU and PU, and that learners consider UID very important in deciding whether to accept an e-learning forum for their learning and communication. This paper contributes to research by identifying the factors that account for the relationship between PEOU and PU, and provides e-learning developers with managerial insights on how to leverage UID for business success.

keep the consumer in mind. Mobile marketing permission and acceptance are core issues that marketers have yet to fully explain or resolve. This chapter provides direction in this area. After briefly discussing some background on mobile marketing, the chapter conceptualizes key characteristics for mobile marketing permission and acceptance. The chapter concludes with predictions on the future of mobile marketing and some core areas of further research.

Chapter XV

This chapter has the aim to point out an important functionality of a ubiquitous mobile system and more specifically its application in the learning domain. This functionality is the possibility to access the learning material from mobile devices, like PDAs (Personal Digital Assistants) during their offline periods and the technique to approach it, called hoarding. The chapter starts with the overview of a concrete mobile learning system – Mobile ELDIT, thus that to give a clear idea of when and how this problem appears and why it is important to pay attention to it. Later, a description of the development approaches for both general and concrete solutions are discussed, followed by more detailed description of the important hoarding steps.

Chapter XVI

The advancement of technologies to connect people and objects anywhere has provided many opportunities for enterprises. This chapter will review the different wireless networking technologies and mobile devices that have been developed, and discuss how they can help organizations better bridge the gap between their employees or customers and the information they need. The chapter will also discuss the promising application areas and human-computer interactions modes in the pervasive computing world, and propose a service-oriented architecture to better support such applications and interactions.

Chapter XVII

This chapter introduces the notion of trust as a means to establish security in mobile ubiquitous applications. It argues that trust is an essential requirement to enable security in open network environments. In particular in wireless ad hoc environments where there is no network topology. In such environments communication can only be achieved via routes that have to be trusted. In general it may be hard, or even impossible, to establish, recall and maintain trust relationships. It is therefore important to understand the limitations of such environments and to find mechanisms that may support trust either explicitly or implicitly. The author considers several models that can be used to enable trust in such environments, based on economic, insurance, information flow and evolutionary paradigms.

This chapter examines how people in organizations appropriate new computer-based media, that is, how they adopt, reconfigure and integrate advanced communication technologies such as groupware or desktop conferencing systems into their work practice. The chapter presents and analyses findings from an in-depth field study of the adoption and use of a Web-based groupware application – a "virtual workspace" – in a large multinational firm. The analysis focuses, in particular, on the fact that people in modern organizations have plenty of media at their disposal and often combines old and new media to accomplish their work tasks. Furthermore, it highlights the crucial role of organizational communication genres in shaping how people adopt and use new media. The authors argue that understanding and facilitating the process of appropriation is the key to the successful introduction of new media in organizations.