



This chapter appears in the book, *Unwired Business: Cases in Mobile Business*
edited by Stuart Barnes and Eusebio Scornavacca © 2006, Idea Group Inc.

Chapter XVI

Outcomes of Introducing a Mobile Computing Application in a Healthcare Setting

Liz Burley, Swinburne University of Technology, Australia

Helana Scheepers, Monash University, Australia

Barbara Haddon, Intelligent Data Pty Ltd, Australia

Abstract

Interest in mobile computing applications has been increasing over the past few years. The healthcare sector has begun recognizing the potential for providing at point-of-care access to applications through mobile devices. However, there are challenges for the successful implementation of mobile computing applications. This chapter explores the implementation of a mobile computing solution in two Australian residential aged care facilities. The chapter compares the results of the implementation with previous studies and outlines a hierarchy of three levels of impact within the two organisations. The chapter furthermore describes the challenges, impacts, and outcomes. Finally it lists some strategies for alleviating some of the difficulties with mobile computing solutions.

Introduction

Interest in mobile computing applications has been increasing over the past few years. One indication of this is that by 2003, Microsoft had registered 11,000 applications, and now has more than 380,000 professional Windows mobile developers worldwide (Smith, 2004). The mobile computing applications of most interest to corporations are e-mail, calendars, sales force automation (SFA), customer relationship management (CRM), and field force automation (Smith, 2004). The healthcare sector has also begun recognizing the potential for providing at point-of-care access to applications through mobile devices, for the healthcare professional (Burley & Scheepers, 2004; McCreadie, Stevenson, Sweet, & Kramer, 2002; Rothschild, Lee, Bae, & Bates, 2002).

However, there are challenges for the successful implementation of mobile computing applications.

First, organisations need to plan carefully for the implementation of the mobile computing initiative. What are the benefits they hope to achieve by introducing the mobile computing initiative? What strategies will they put in place to ensure that they achieve those benefits? In a survey of 100 companies conducted by Optimize Research only 10% of the respondents had fully realized a return on investment (ROI) from their mobile-technology investment. It was suggested that the reason for this could well be lack of clear goals or coordinated strategy (Violino, 2003). One of the key findings in a recent study on achieving business value from implementing mobile computing was the importance of having a clear business objective and a “willingness to make business changes to embrace the transformation to core business processes which are driven by the mobile technologies” (Scheepers & McKay, 2004).

Second, there needs to be careful consideration of the business processes involved, the type of information accessed by the mobile application, and the required availability of that information. What information architecture will be deployed? Not all information needs to be in real time. As Evans (2003) notes, “the important thing about ‘real time’ is that it’s not always the right thing to do. Not all business processes can be improved by speeding them up.... So in effect, business processes should run at ‘right time’ not ‘real time’ for your specific situation” (Evans, 2003). The ideal mobile computing application allows a balance between synchronised and real-time data (Haywood, 2002, cited in Synchrologic, 2003).

Third, organisations need to anticipate possible outcomes of the use of the mobile computing application for end users (Scheepers & McKay, 2004). What effect will the mobile computing application have on the day-to-day work practices of the end user? This chapter explores the planning, implementation and usage outcomes of a mobile computing solution in two residential aged care facilities. The chapter compares the results of the implementation with previous studies in the pharmacy sector and outlines a hierarchy of three levels of impact within the two organisations. The chapter furthermore describes the challenges, impacts and outcomes. Finally it lists some strategies for alleviating some of the difficulties with mobile computing solutions.

16 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/outcomes-introducing-mobile-computing-application/30598

Related Content

Privacy Compliance Checking using a Model-Based Approach

Siani Pearson and Damien Allison (2011). *E-Business Applications for Product Development and Competitive Growth: Emerging Technologies* (pp. 199-220).

www.irma-international.org/chapter/privacy-compliance-checking-using-model/49283

Technological Challenges and Issues Facing E-Partnerships

Fang Zhao (2006). *Maximize Business Profits Through E-Partnerships* (pp. 86-110).

www.irma-international.org/chapter/technological-challenges-issues-facing-partnerships/26152

Analysis of Business Process Models in Enterprise Web Services

Mabel T. Kung and Jenny Y. Zhang (2008). *International Journal of E-Business Research* (pp. 69-87).

www.irma-international.org/article/analysis-business-process-models-enterprise/1907

Ontology Exchange and Integration via Product-Brokering Agents

Sheng-Uei Guan and Fangming Zhu (2007). *Semantic Web Technologies and E-Business: Toward the Integrated Virtual Organization and Business Process Automation* (pp. 169-184).

www.irma-international.org/chapter/ontology-exchange-integration-via-product/28896

Digital Banking: Challenges, Emerging Technology Trends, and Future Research

Agenda

Elisa Indriasari, Harjanto Prabowo, Ford Lumban Gaoland Betty Purwandari (2022). *International Journal of E-Business Research* (pp. 1-20).

www.irma-international.org/article/digital-banking/309398