



**IRM PRESS**

701 E. Chocolate Avenue, Suite 200, Hershey PA 17033-1240, USA  
Tel: 717/533-8845; Fax 717/533-8661; URL-<http://www.irm-press.com>

**ITB11821**

---

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

## **Chapter X**

# **Bringing the Enterprise System to the Front Line: Intertwining Computerised and Conventional Communication at BT Europe**

Alf Westelius,  
Linköping University and Stockholm School of Economics, Sweden

Pablo Valiente,  
Stockholm School of Economics, Sweden

## **Abstract**

---

*This paper draws on the need to understand how mobile technology is implemented and used at the organisational level. IT is a general-purpose technology and its use involves a high degree of uncertainty. Therefore, managers have trouble in identifying the real scope, the functionality, and the impact of new mobile applications. However, these three types of uncertainties need to be handled in change management projects where new information technology is involved. Gradual uncertainty reduction at these three different levels—that is, what technology can do, will technology work, and will*

*users adopt it—is studied in this chapter. This is achieved through an analysis of the implementation process of an information system at BT Europe, a leading supplier of forklift trucks. The analysis shows how the computerised parts of the information system are complemented by mindful intertwining with the noncomputerised communication and manual data processing in order for the information system to work.*

## Introduction

---

The possibilities of mobile technology continue to broaden and expand. Many organisations have invested, or are considering investing, in this technology. The present slowdown in investments is expected to be temporary, and hopes for the future are high. One area that is attracting attention is the use of mobile terminals that can give mobile employees access to central information systems, such as enterprise resource planning (ERP) systems.

At the level of the business enterprise, investment decisions related to new technology in general and mobile technology in particular are usually fairly challenging. Some industry analysts and telecommunications providers claim dramatic business improvements, but many IT and business managers have expressed concern that the business value of mobile technology may not be quite as substantial as suppliers would like them to believe. One reason for this may be IT's "ambiguous" (Earl, 2003) and open-ended character (cf Asaro 2000; Orlikowski & Hofman, 1997). Earl (2003) proposes that three important sources of ambiguity are uncertainty regarding what technology can do, whether the technology will work, or if it will even be adopted. The aim of this chapter is to describe and analyse the uncertainty resolution process in a large-scale implementation of mobile technology, and the interplay of new and old technology and organisational solutions. This chapter analyses the implementation process of an information system (EASY—Engineer Administration SYstem) at a leading supplier of forklift trucks where mobile terminals are used to give service technicians access to the ERP system. The mobile terminals provide service technicians with an interface to structured, written data in order to rationalise the entire service order process. The project was carried out as a follow-up to a business process reengineering (BPR) project that resulted in the implementation of a common ERP system across the European division of the company.

The chapter is organised as follows. First, we present models central to the article, followed by a brief account of the research method. Then the implementation of the mobile application is described. The description includes the project background, a number of identified benefits, the project itself, the organisational impact and the management of change within the project, and finally some technical considerations. We conclude the paper with a discussion of three different kinds of ambiguity of IT implementations that are based on open-ended technologies, how the uncertainties interact, and how computerised and manual parts of the information system intertwine to create a functioning system.

14 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/bringing-enterprise-system-front-line/30592](http://www.igi-global.com/chapter/bringing-enterprise-system-front-line/30592)

## Related Content

---

### The Influence of Social Marketing Drives on Customer Satisfaction via Demographic Variables as Moderating Factors

Rand H. Al-Dmour, Hani H. Al-Dmour and Eatedalameen Ahmadamin (2023). *International Journal of E-Business Research* (pp. 1-13).

[www.irma-international.org/article/the-influence-of-social-marketing-drives-on-customer-satisfaction-via-demographic-variables-as-moderating-factors/319325](http://www.irma-international.org/article/the-influence-of-social-marketing-drives-on-customer-satisfaction-via-demographic-variables-as-moderating-factors/319325)

### An Empirical Study of the Effect of Internet Services on the Preferential Adoption of Mobile Internet

Mohamed Abdalla Nour (2014). *International Journal of E-Business Research* (pp. 53-73).

[www.irma-international.org/article/an-empirical-study-of-the-effect-of-internet-services-on-the-preferential-adoption-of-mobile-internet/110933](http://www.irma-international.org/article/an-empirical-study-of-the-effect-of-internet-services-on-the-preferential-adoption-of-mobile-internet/110933)

### HTML Segmentation for Different Types of Web Pages

Evelin Carvalho Freire de Amorim (2015). *The Evolution of the Internet in the Business Sector: Web 1.0 to Web 3.0* (pp. 98-119).

[www.irma-international.org/chapter/html-segmentation-for-different-types-of-web-pages/122157](http://www.irma-international.org/chapter/html-segmentation-for-different-types-of-web-pages/122157)

### An Architecture for Authentication and Authorization of Mobile Agents in E-Commerce

Wee Chye Yeo, Sheng-Uei Guan and Fangming Zhu (2003). *Architectural Issues of Web-Enabled Electronic Business* (pp. 342-355).

[www.irma-international.org/chapter/architecture-authentication-authorization-mobile-agents/5210](http://www.irma-international.org/chapter/architecture-authentication-authorization-mobile-agents/5210)

### Pricing Strategy of Online Knowledge Market: The Analysis of Google Answers

Zuopeng (Justin) Zhang and Sajjad M. Jasimuddin (2009). *Electronic Business: Concepts, Methodologies, Tools, and Applications* (pp. 2556-2570).

[www.irma-international.org/chapter/pricing-strategy-online-knowledge-market/9425](http://www.irma-international.org/chapter/pricing-strategy-online-knowledge-market/9425)