

Chapter XXIV

Influence of Mobile Technologies on Global Business Processes in Global Organizations

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ABSTRACT

Organizations are globalizing their business primarily due to the communications capabilities offered by Internet technologies. As a result, there are global business processes that span across multiple geographical locations and time zones. The influence of mobility on these global business processes does not appear to have been studied in sufficient detail. Furthermore, mobile technology goes far beyond its ubiquitous use as a mobile phone for voice communication or for the exchange of messages. This chapter discusses and recommends a model for transition and integration of mobility into global business processes. We also envisage the accommodation of mobile Web services in mobile transformations enabling business applications to collaborate regardless of their technological platforms.

INTRODUCTION

Technology has changed the way people and businesses communicate with each other. Information and communications technology (ICT) has made a

big leap in communications in the previous decade. With the communications backbone of the Internet, ICT has influenced the very way of life for many people and organizations. As a result, the method and manner in which the organizations carry out

their businesses have also changed. Ubiquity of business processes, as per Arunatileka (2006), is likely to play a major role in future business environments. This ubiquity is a result of organizations starting to collaborate electronically, paving way for collaborative global businesses, resulting in significant strategic advantages to these organizations. These advantages include business growth in the global market, and building strategic alliances and partnerships for business organizations (Arunatileka & Arunatileka, 2003). However, when it comes to extending and applying the concepts of collaboration through time- and location-independent mobile technologies, it appears that organizations are still relatively nascent. The paucity of literature in this regard provided us with the necessary impetus to study mobile technologies from the point of view of their application in global businesses.

This chapter accomplishes our aim of studying and applying mobility to global business processes. This chapter also reports on construction and application of corresponding models to enable mobile transformations (m-transformations). The lead author of this chapter has also validated and applied these models through “action research” at a real global organization. This well-thought-out application of mobility resulted in streamlining and speeding up of the existing processes, as well as exploration and creation of totally new business processes within that global organization.

Mobile Technology

The advancement of mobile technologies has created the opportunity for organizations to adapt this technology in their business processes. Per Schneiderman (2002), faster access to the corporate database and new applications that embody wireless and Internet connectivity are two great advantages that organizations can develop in terms of their business operations. The usage of mobile devices in the modern era is so important that their incorporation in business processes can be classified as one of the crucial factors in the survival and prosperity of a business. Birchler (2004) clearly points out that the exponential growth of

the Internet has challenged the prevailing understanding of network organizations and ownership. Therefore mobility, combined with the Internet, provides organizations with a powerful tool to be used strategically for connections in the electronic business world. Deshpande, Murugesan, Unhelkar, and Arunatileka (2004) describe the requirement of delivering the Web in a single composite device; their vision, under the auspices of the Device Independent Web Engineering (DIWE) Group, is to make the Web accessible to “anyone, anywhere, anytime, anyhow.”

The use of portable computing through communications devices is forcing the reappraisal of the capabilities and future of wireless. In today’s competitive markets, mobile technology is providing person-to-person communication, resulting in a new era of customer relationship management for organizations (Arunatileka & Unhelkar, 2003). Mobility, in the context of businesses, can be understood as the ability of processes to be executed anywhere and at anytime. Mobile technology encompasses the various devices and applications that have been put together to provide organizations and individuals with the ability to conduct businesses as per the DIWE vision mentioned earlier.

This study started with observing daily business activities of a global organization in order to ascertain how m-transformation could enhance their business processes. These processes were then modeled using the activity diagrams of the unified modeling language (www.omg.org). This modeling was followed by “re-engineering” of the business processes based on the theoretical m-transformation models formulated by the researchers. Thereafter, two selected business processes related to “timesheets” were transformed into mobile-enabled processes. The following sections describe the research problem and the approach taken in solving it in greater detail.

THE RESEARCH PROBLEM

The research problem was formulated to understand whether m-transformation of certain business processes of the company would result in improved

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