Mobile Enterprise Readiness and Transformation

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INTRODUCTION

Recent studies claim that mobile information and communication technologies (ICT) offer a plethora of new value propositions and promise to have a significant transformational impact on business processes, organizations, and supply chains (Kornak et al., 2004). However, despite its potential contributions, enterprise adoption of mobile ICT has not been as widespread as initially anticipated. Previous research has argued that successful adoption and implementation of any emerging ICT, such as mobile ICT, often requires fundamental changes across an enterprise and its current business practices, organizational culture, and workflows (Taylor & McAdam, 2004; Rouse, 2006). Hence, in order to minimize organizational risks and maximize the potential benefits of mobile ICT, enterprises must be cognizant of the value of enterprise mobility to their organization and accurately evaluate their level of "readiness" for mobile ICT adoption (Hartman & Sifonis, 2000; Ward & Peppard, 2002). This paper reviews the transformational value and impact of enterprise mobility and explores the critical dimensions for determining an enterprise's readiness for mobile ICT. Both theoretical and managerial implications are discussed.

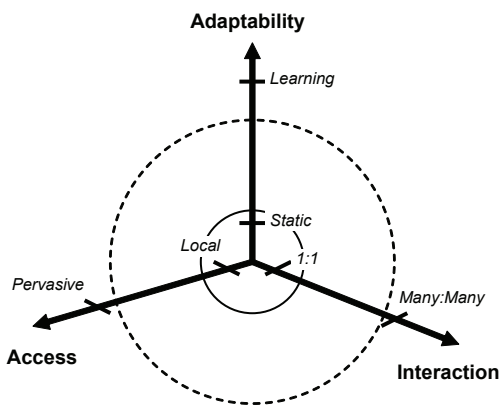
BACKGROUND

Over the past few years mobile ICT have advanced at a tremendous pace making an always-on connection, anywhere and anytime, a growing reality. The rapid proliferation of mobile devices has led to an increasingly mobile society in which users now expect to have instant communication means, data access, and commerce capabilities. A similar trend has also seeped into the enterprise domain. The use of mobile ICT in enterprises has evolved from being simplistic point solutions and small projects focused on productivity improvements and costs savings to strategic and large-scale enterprise-wide implementations that enable organizations to create new core competencies, gain and sustain competitive advantages, and define new markets (Davidson, 1999; Kornak et al., 2004).

The Mobile Enterprise

So what is a mobile enterprise? Simply deploying laptops so employees can take work home does not constitute a mobile enterprise. Pundits have argued that a slight increase in mobility that a laptop affords amounts to little more than a very small geographic extension of the existing static enterprise. Similarly, a mobile enterprise is not merely a collection of people with handheld devices, smart phones, tablet PCs, and pagers. Many enterprises already have such a workforce, however, it often does not change how those people work with each other and the rest of the organization. Therefore, bolting a group of mobile workers onto an organizational chart does not create a new organization and often does very little to enhance the existing one. However, the more mobile workers an organization has, the greater will be the need to transform at least part of that company into a mobile enterprise. More specifically, it will require a rethinking of how business is organized, how people interact and collaborate, how corporate resources are accessed, and how adaptable an enterprise is (Barnes, 2003; Rouse, 2005). Building on this notion, we propose that mobile enterprises exhibit higher levels of access, interaction, and adaptability than their static counterparts do. In visual terms, static enterprises tend to exist in spheres closer to the origin (see Figure 1). The further the sphere is from the origin, the higher the

Figure 1. The dimensions of the mobile enterprise



level of enterprise mobility. Thus, independent of location, the mobile enterprise is built on a foundation of processes and technologies allowing full access to organizational resources, which results in improved adaptability, access, and interaction among employees, customers, partners, and suppliers (Basole, 2005).

Benefits of Enterprise Mobility

With this understanding of the mobile enterprise, it therefore becomes more transparent what benefits mobile ICT can offer. The ability to access the corporate network and resources anywhere and anytime is one of the primary benefits and key drivers to adopting mobile enterprise solutions. Field workers are no longer tied to desktop computers to check mission- and task-critical data. The use of mobile ICT enables workers to receive timely answers, which in turn can lead to timely decisions. Enterprise mobility solutions also offer the potential of achieving significant cost savings. Expensive computing equipment can be replaced with smaller, more portable, and less expensive handheld devices. Field workers can use these devices to be immediately connected to all the sources they need. Furthermore, replacing paper-based processes with mobilized applications reduces the potential for errors in transferring information to a call report or clinical chart, leading to a higher level of data accuracy and integrity, which in turn can be harvested for overall business intelligence use. Better access to corporate resources—both data and people—naturally leads to a higher level of productivity, as mobile workers are able to view data that allows them to respond and execute faster to changing market conditions.

ENTERPRISE TRANSFORMATION THROUGH MOBILE ICT

Mobilizing enterprise applications and providing business professionals access to information anywhere and anytime is clearly an important first step in gaining business value (Barnes, 2003; Kornak et al., 2004); however these gains are only the beginning. We argue that enterprises can realize a much broader range of benefits over time by pursuing a multi-stage mobile transformation process. Research has shown that ICT have the ability to change and fundamentally transform enterprises in a number of ways (Basole & DeMillo, 2006; Rouse, 2006). This transformational impact can be primarily experienced and realized at the strategic, operational and organizational culture level (Taylor & McAdam, 2004). Indeed, the impact of mobile ICT is far beyond mere business process improvements and enhancements (Davidson, 1999; Kornak et al., 2004; Basole, 2005). Extending this previous work, four distinct stages of mobile enterprise transformations are proposed (see Figure 2).

Mobilization (Stage 1)

The first stage of the transformation process begins with the mobilization of existing data and applications. Mobilization refers to the process of making current business data, pro-

Figure 2. Stages of enterprise transformation through mobile ICT