

Chapter 6.1

Comprehensive Impact of Mobile Technology on Business

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ABSTRACT

In this chapter we explore the concept of enterprise, or organisational mobility. We examine how mobility in a business can provide a competitive advantage and enhanced sustainability. Potential industry applications for mobile technology are discussed. We delve further by exploring the growth areas of mobile technologies and outline key success factors for the stakeholders in the mobile technology arena. We assess the many opportunities mobile technology brings to various businesses. Furthermore the impacts of mobile technology on organisations and society are evaluated. We then conclude by outlining various competing mobile technologies available to the market both today and in the future.

INTRODUCTION

The business need for mobility and real-time connectivity are terms that are being used frequently in the technology industry but often without compelling business applications or concise and agreed-upon definitions. While it is important to note that technology on its own is only a means to an end, the purpose, or business objective, to which the most suitable technology is required has to be developed.

Mobility can enhance productivity, as workers are not constrained to their desk in order to perform everyday business tasks — for example, employees can still work whilst waiting in meeting rooms for a meeting to start. Furthermore, it can also help organisations enhance competitive

advantage by allowing the organisation to move toward the concept of real time enterprise (RTE) through real-time data input and quicker decision making regardless of location.

However, despite these benefits, mobility does have its disadvantages, namely blurring the divide between work and non-work life. This is especially evident in the Information Age.

Certain components of the value chain have leaped ahead of other aspects, prohibiting greater uptake of mobile technology. While mobile device manufacturers continue to produce devices at an alarming pace, uptake and adoption has slowed due to factors outside their control. Apart from commercial reasons such as cost, security fears (both real and unfounded) are inhibitors. There are also external factors that can inhibit the movement toward a truly mobile society. The limitations of carrier infrastructure and standardisation issues are just a few. Enablers to greater mobile uptake would be greater applications provided by a single device, with faster connectivity than the traditional GPRS technology.

The Internet has been a blessing in disguise to the apparent and recent surge in the mobile age. Mobile technologies leverage on the strengths of the Internet for services such as data communications and information services. Where will it lead to? What opportunities will it provide to businesses? How will mobile technology impact on daily life? These and other questions will be answered in this chapter.

MOBILE TECHNOLOGY

Mobile technology has evolved from the early '80s. It now includes wired LANs (local area networks), laptops providing a sense of mobility, and computing power in a handbag. In 2003 we saw more and more proliferation of wireless connectivity, and growing wireless hubs have brought with them multiple device manufacturers. Devices include laptops, phones, and PDAs

(personal digital assistant), as well as those in the converged marketplace, that is, a PDA combined with a mobile phone. The predominance of higher transmission speeds will allow devices to be more useful in accessing the ever-growing applications.

The growth in devices, infrastructure, applications services, and consumer demand to be “always connected” will exponentially drive mobile technology needs.

Consumers will find greater availability to information, and opportunity to complete transactions such as purchasing goods and services within the mobile environment. This will become increasingly predominant and common over the next few years, before a slowing down or a catching up of one or more of the components of the value chain.

Some Industry Facts

Increased mobile technology and the desire for corporations and executives to be “always on” and “always connected” has led to some exciting industry developments; below are some extracts of these developments.

- Datamonitor (2003) claims that as “shipments of mobile hand-held devices will reach 300 million by 2006, the need for dedicated, specialised functions for business applications will increase for most corporations.”
- Forrester (2001) claims between 2001 and 2003 corporations have become more mobile, with usage of certain corporate applications increasing up to 100%, with growth of 50% year-to-year.
- Kwikhand (2003), a Palm solutions provider, claims in its recent report entitled “Logistics & Materials Management,” that, “To stay competitive, it is imperative that you drive down costs, accelerate productivity, and synchronise operations. The supply chain generates increasing ‘data capture’ require-

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