

# Chapter XLII

## Evaluation of Mobile Technologies in the Context of Their Applications, Limitations, and Transformation

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### ABSTRACT

*Emerging mobile technologies have changed the way we conduct business. This is because communication, more than anything else, has become extremely significant in the context of today's business. Organizations are looking for communication technologies and corresponding strategies to reach and serve their customers. Mobile technologies provide ability to communicate independent of time and location. Therefore, understanding mobile technologies and the process of transitioning the organization to a mobile organization is crucial to the success of adopting mobility in business. Such a process provides a robust basis for the organization's desire to reach a wide customer base. This chapter discusses the assessment of a business in the context of mobile technology, describes the application and limitations of mobile technology, presents a brief history of mobile technology and outlines an initial approach for transitioning an organization to a mobile organization.*

### INTRODUCTION

This chapter evaluates the effects of mobile technologies on business and outlines an initial process of transitioning to mobile business. In 1874, when Alexander Graham Bell invented the telephone, he could not have imagined the significant impact it would have on number of aspects of human life. Similarly today, ad-

vancement in information and communication technology (ICT) has dramatically changed the way people live and conduct their businesses. One of the dramatic aspects of modern-day business activities is that these activities are conducted independent of location and time. For example, businesses are able to sell goods, facilitate customer enquiries, and coordinate their services through disparate geographical

and time boundaries primarily due to the wonders of communications technologies. Alter (1996) describes the ICT as tools for doing things, rather than just for monitoring performance of yesterday or last week. Thus it is quite logical to conclude that ICT has changed the very nature of the workplace.

The basis for the communications technologies in most modern business applications is the Internet. Increasingly, the required access and connection to the Internet has become very simple and ubiquitous in most developed nations. This Internet access has opened up opportunities for organizations to revolutionize their business processes. Undoubtedly, improvement of the communication technology has impacted not only our business domain, but also our socio-cultural domain. This, as per Unhelkar (2004), has resulted in the “next wave” of technologies called mobile technologies:

*Mobile technologies are becoming the next technology wave as the increasing popularity and the functionality captures many hearts. Riding on the back of traditional Internet, mobile networks ensure that information is available to its users independent of a physical location.*

This ubiquitous connectivity accorded by mobile networks referred to above impact has facilitated the increased communication between people. Furthermore, this mobile connectivity has also improved the ability of business processes to exchange data and conduct transactions.

This transformation of businesses has been evolutionary rather than revolutionary. For example, at the beginning of the Internet age, with the aid of its communications capabilities, businesses were transferred to e-business, and we even had the opportunity to do our daily business activities from home. Ghanbary (2003) has described the Internet as the most powerful

tool that brings information to our homes through communication lines, like water and electricity that come by power lines and pipes. Powerful search engines and the capability of sharing information are the great advantages of the Internet.

With the aforementioned strengths of mobile connectivity, it is also essential to work out a process that would outline “how” an organization can transition to such an m-enabled organization. However, this potential process of transitioning an organization to a mobile organization needs to incorporate all the major advances of mobile technologies of the past decade.

This is so because the philosophy of ordinary communication has given way to more advanced and efficient communications based on mobile and wireless technologies that enable business processes to be executed independent of time and location, resulting in a better, faster, and satisfactory response to the needs of the customer.

This impact of mobility is an important element of the mobile transition process that is felt at both business and personal levels. However, as of today, this process framework remains a challenge that needs to be further researched to enable businesses to transition successfully. This need for further investigation is also ratified by Ranjbar (2002), who correctly mentions: “It is not always possible to foresee all the implications of a new technology until it is adopted by the mass of population and used for a relatively long time.”

With the increase in the number of mobile organizations, the service providers realize that they need to identify their strengths as well as their weaknesses in terms of providing mobile services that provide solutions as well as rectify the shortcomings. The analyses of the weaknesses and strengths will give them an advantage to provide a convenient service and increase their customer loyalty.

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