

# Chapter XIX

## Mobile Devices and Mobile Applications: Key Future Trends

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### ABSTRACT

*Mobile devices are comprised of a multitude of various applications and operating systems that have significantly impacted the way people interact with each other as they go about their lives in this growing global economy. Today, businesses and organizations are facing new challenges in defining strategies, visions, and business processes in an effort to support the up and coming mobile market of devices and applications. In addition, companies are confronted with the need to monitor their critical business practices and processes throughout the organization in an effort to keep the competitive advantage in the growing mobile technology market. Since many company funds are limited with their IT budgets, organizations will need to prioritize its goals to determine how deeply committed they are to keep a vision on the future through the mobile market. This chapter will show how mobile devices with all of its various software and hardware devices can move an organization's strategy into showing how it is important for companies to invest in this growing technology. Some of the more commonly known devices, operating systems, and critical applications will be identified. Finally, a conclusion will be drawn on the future of the mobile technology environment*

### INTRODUCTION

Mobile devices and the various mobile applications are shaping the future of how people communicate, work, travel and perform daily tasks in a constant changing global economy. People are being impacted in their jobs, at home and even when they don't even realize it. Major manufactures of mobile devices and mobile operating system have stood up and have taken notice for the demand of mobile devices. This technology is the driving force for the future. Technologies for

wireless communications are a viable and growing market with new demands for speed and abilities to interact with applications on back systems at corporate offices. Mobile based servers will bring new services and technology to the future of mobile computing.

### IMPACT OF MOBILE DEVICES ON PEOPLE

People have become accustomed to changes in their environment as new generations of technology touch

their everyday lives. This shift in technology is causing people to see the world through new views and paradigms (Singh, 2003). We see these paradigm shifts in phases such as when our parents went from listening to radio to watching television. We have seen the shift in the paradigm when our generation went from stand-alone personal computers to retrieving information off the Internet (Singh, 2003). The latest shift in paradigm is the explosive developments of the mobile devices and the applications. These developments are constantly being expanded upon to further the use of mobile devices in everyday personal needs and strategic business processes. People today are reeling from the benefits of mobile devices through increased productivity. The people benefiting the most are the mobile workers, especially the executives, middle management managers and salespeople who are not bound by a desk or specific work locations (Cozza, 2005). Mobile devices are giving added levels of service to people through better customer support and improved customer care that in turn has increased the company return on investment (Cozza, 2005). Employees have access their email, contacts, corporate data and up to date meeting schedules. This invaluable asset information is shaping the corporate employee of today.

The impact of mobile devices has created new experiences for people in a way that stretches beyond the individual. Corporations are feeling the impact of the added availability of mobile devices, as their employees are able to stay abreast of hour-by-hour changes in the company daily business. Corporate IT staffs responsible for supporting mobile devices are impacted by their own set of challenges in their daily work. Many companies have been forced to increase staffing positions specifically to support the mobile infrastructure. Companies are coming to understand that staffing requirements are changing as they look at the total cost of ownership in supplying mobile devices to employees (Cozza, 2005). IT staffing personnel affected by deployment of these devices are responsible for maintaining the hardware, licensing agreements and the profiles associated with each device. Mobile devices can even impact people who don't actually have their own mobile device. Companies must follow a strict security policy in securing the access and use of mobile devices to all employees. Otherwise data can and will be compromised.

## **MOBILE DEVICES AND MOBILE OS IMPACT ON THE ENVIRONMENT**

People today can't help but get involved with mobile devices on today's market. These devices are small data-centric handheld computers (Cozza, 2005). They are about one pound or less in weight. People are incorporating them into their everyday life. People today use cell phones for talking but are also starting to use the cell phone for (SMS) messages, sending pictures and graphics (Singh, 2003). Personal Digital Assistant also called the PDA is another device that is growing on corporate America. It offers the individual the ability to view high-resolution graphics, handwriting recognition, and point-and-click pen to make it easier to navigate around the device (Singh, 2003). These devices are starting to impact the contents of corporate data. People today can now access corporate data and downloaded to their mobile device. Mobile devices are expanded the tools and reach of the corporate employees access to corporate data. Employees changing the way they function in their daily jobs. Yet another important mobile device impacting our lives is the pocket pc. It is a fully powered pc. It may not have the same abilities as a workstation in the office, but it does increase the efficiency of the corporate employee by giving them workstation like applications to manipulate the corporate data locally on their mobile device. The range of the market strength is limited in the mobile device market. Currently only a limited a few vendors are able to make headway. Some of the vendors with devices that are known for impacting the environment are Dell, HP, Nokia, Palm and RIM (Cozza, 2005). The vendors that make mobile device operating systems impacting the environment today are Microsoft Windows Mobile, Palm OS, RIM OS and Symbian OS (Cozza, 2005).

## **MOBILE APPLICATIONS IN THE ENVIRONMENT**

People today are thirsting more and more for new and creative mobile applications. The highest impact of mobile applications to date has been surrounded around short message service (SMS) and ring tones (Gartner, 2006). In the near future, the impact of mobile applications will appear to be at its strongest in mobile messaging applications, like e-mail service and instant messaging, which is gaining ground with the

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