Chapter 4.30
Mobile Commerce in South Africa

Anesh Maniraj Singh
University of KwaZulu-Natal, South Africa

INTRODUCTION

The last decade has seen a rush among businesses to get onto the Internet. Since its introduction, e-commerce has grown in leaps and bounds. The frenzy to get online and be a part of the “new economy” was spurred on by media hype describing the Internet as the greatest technology this century. Organisations embarked on initiatives to change their business models, looking for e-strategies as a means of revolutionising their business. By mid 2000, many of the dot.coms were “dot.gones.”

The primary reason for this sudden death was that businesses forgot the basic rule of business: creating economic value. Economic value as defined by Porter (1985) is the gap between price and cost—the larger the gap, the greater the economic value. According to Porter (2001), gaining a competitive advantage does not require a radical approach to business; it requires building on the principles of effective strategy. Businesses that went online should not have looked for e-strategies, but should have improved on their existing strategy to include an e-strategy.

GPRS, wireless Web, handhelds, m-commerce, 2nd coming of the Internet, m-management, killer apps, 2G or 3G, always-on, have been the buzzwords in the media. Is this new hype really worth the fuss? M-commerce has failed in the United States and has made a brief appearance in South Africa. Therefore, this article asks the question “Is there potential to revive m-commerce in South Africa?” In attempting to answer this question, this article will examine issues such as uses of m-commerce, the benefits and challenges of m-commerce, trends in the wireless industry, and the technology underlying m-commerce. This article will also attempt to provide suggestions for harnessing the power of the wireless Web. Most of the discussions are based on universal experience supported with what the current situation is in South Africa; therefore, this article will not be separated into a universal section with a smaller subset focussing on South Africa.
BACKGROUND

What is Mobile Commerce?

Organisations have just begun to get comfortable with e-commerce in terms of what it can do for them and what are its limitations. Some are still coming to grips with e-commerce and have now been hit with the new wave of m-commerce. According to Rainer (2000), m-commerce refers to the use of wireless communications technology to access network-based information and applications using mobile devices. Laudon and Laudon (2004) described m-commerce as the use of wireless technologies for conducting business-to-business and business-to-consumer transactions over the Internet, hence, m-commerce can be described as the mobile Internet (Herron, 2000). Cleenwerck (2002) describes m-commerce as the wireless Web. It is evident from these definitions that the main characteristics of m-commerce are mobility, wireless, mobile devices, and the Internet.

It is evident that m-commerce is merely an extension of the Internet to wireless handheld devices, thus bringing e-commerce into the palms of users beyond the physical boundaries of bricks and mortar. If m-commerce is e-commerce on the move, why all the hype?

Uses of Mobile Commerce

The proposed uses of wireless technology seem like something out of a James Bond movie. However, users should clear the image of driving a BMW with a Nokia cell phone from their minds. Improved communication is probably the most important use of the wireless Web. People have access to text-based data such as short message services (SMS), e-mails, news broadcasts, and file transfers. Advanced functions include booking of tickets for movies and shows and making restaurant reservations. Very advanced features would involve transactions such as purchasing airtime, ordering products online, and secure banking. Some of the other uses include the following:

- **Navigation Systems:** Global Positioning Satellite (GPS) services integrates the wireless Web with satellite and Geographic Information Systems (GIS) to locate people in space. These systems will be able to assist people who are lost to find their way. GPS will also be able to calculate the shortest route between two points, saving time and money.

- **Electronic Wallets:** According to Posthuma (2001), wallets built into cell-phone technology is highly appealing and could herald a new era in business and financial systems whereby users could make payments to vending machines for the purchase of items and effect funds transfers at in-store point-of-sales (POS) systems.

- **Multipurpose Remote Controls:** Handheld devices will soon be linked to all the electronic devices in a home, allowing one to control gates, burglar alarms, televisions, sound systems, and just about anything that is electronic. Currently, some models of the Ipaq® have a multidevice interface. The use of these devices as remote controls is limited by appliance manufacturers’ developing devices compatible with PDAs. Other uses of m-commerce include stock trading, weather forecasts, vehicle tracking, and instant messaging, among others.

The uses of m-commerce are limited only to the extent of one’s imagination. However, Reedy, Schullo, and Zimmerman (2000) warned that certain products such as perishables and small items were not suited for sale on the Internet. Similarly, La Fontaine (cited in Brewin, 2000) noted that not all business opportunities can be translated onto the wireless Web. The uses of m-commerce are many, but do they bring with them any benefits?
Related Content

Secure Modified Ad Hoc On-Demand Distance Vector (MAODV) Routing Protocol
[www.igi-global.com/article/secure-modified-ad-hoc-on-demand-distance-vector-maodv-routing-protocol/179561?camid=4v1a](www.igi-global.com/article/secure-modified-ad-hoc-on-demand-distance-vector-maodv-routing-protocol/179561?camid=4v1a)

Panoramic Street-View Exploration using a Multi-Display Mobile Application
[www.igi-global.com/article/panoramic-street-view-exploration-using/76306?camid=4v1a](www.igi-global.com/article/panoramic-street-view-exploration-using/76306?camid=4v1a)

Modeling and Analyzing User Contexts for Mobile Advertising
[www.igi-global.com/article/modeling-analyzing-user-contexts-mobile/55890?camid=4v1a](www.igi-global.com/article/modeling-analyzing-user-contexts-mobile/55890?camid=4v1a)

MICA: A Mobile Support System for Warehouse Workers
[www.igi-global.com/article/mica-mobile-support-system-warehouse/51571?camid=4v1a](www.igi-global.com/article/mica-mobile-support-system-warehouse/51571?camid=4v1a)