

# Mobile Commerce in South Africa

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## 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, 2<sup>nd</sup> 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 Posthumus (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?

## M-COMMERCE IN SOUTH AFRICA

### Benefits of Mobile Commerce

According to Navision (2002), the benefits of m-commerce are threefold (i.e., it provides immediate access to information where it is needed, it helps employees respond immediately to business needs, and it allows organisations to provide better field service). Wireless makes communication possible in areas of uneven terrain, such as mountains, where it is difficult to install cable. According to Haag, Cummings, and Dawkins (2000), serving customers goes beyond the provision of products and services. Businesses need to provide perfect service at the customer's moment of value; one of the dimensions of which is *place*. M-commerce makes it possible to deliver service where the customer wants it, such as at his or her work place, at home, and even at the beach. Armed with a cell phone or a PDA, a sales consultant can provide near-perfect information to assist the customer in his or her buying decision, immaterial of the customer's location.

M-management, an offshoot of mobile commerce, makes it possible to keep managers apprised of all events at the workplace, wherever in the world the manager may be. M-productivity, also an offshoot of mobile commerce, makes it possible to improve worker productivity. Employees can access their contact information, review their

calendars, and respond to e-mail, which ordinarily would have to be done at a desk. Other benefits of m-commerce include the following:

- **Immediate Access:** Due to the nature of the technology, cell phones and PDAs are instantly on, which reduces overhead time, which is the time taken to get started. PCs take an extremely long time to get started, initialise all the peripherals, and then to establish a dial-up connection with the service provider.
- **Use of Niche Time:** Time that is unavailable or wasted whilst waiting for services or sitting idle in public transport can be leveraged for work (Rainer, 2000). GNER, a United Kingdom train operator, has installed WiFi on its trains. In first class, access is free, and as a result, standard-class commuters are upgrading to first class (WiFi Growth on UK Trains, 2004). WiFi hotspots are making it possible to access the Internet in airports, restaurants, and other public places in South Africa.
- **Generate New Income:** In order to generate new income, firms need to advertise extensively in traditional media such as television, radios, and billboards to stimulate impulse buying. The advertising must contain the message that these products can be ordered from ones handheld device.
- **Reduce Costs:** Cell phones, pagers, and PDAs are much cheaper than computers and laptops; this reduces organisational cost and makes m-commerce accessible to larger markets.
- **New Marketing Medium:** Short-range broadcast systems can be used within small areas or buildings such as malls, where advertisements and special offers could be sent to their mobile devices (Gaede, as cited in Mobile Services: Less Talk, More Profit, 2005).

It is evident that the benefits of m-commerce are immense. But how does one get around those tiny key-pads?

### Challenges Facing Mobile Commerce

Mobile phones have extremely small screens that are capable of delivering, at maximum, approximately eight lines of text (Herron, 2000). Furthermore, the absence of a QWERTY keyboard makes typing a painful experience. According to Ewalt (2000b), even when one gets the technology working, purchasing online using a cell phone or PDA is extremely difficult due to the low resolution of the screens, unreliable network support (dropped calls), and poor security.

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