

Mobile services and solutions promise to transform African businesses in the same way that the Internet transformed organisations in the more affluent world, writes **LANCE HARRIS.**



Mobility changes way Africa does business

MOBILE TELEPHONY HAS brought telecoms services within reach of more than 40% of Africa's people in the space of a decade and a half. With that massive base of mobile subscribers in place, the foundation is now laid for entire industries in South Africa and throughout the continent to use mobile solutions and services to change the way they operate.

From financial services to the media, few markets will be untouched by mobility in the years to come. Indeed, the impact on some sectors, such as banking, has already been profound.

For example, research conducted by World Wide Worx last year found that more South Africans use cellphone banking (28% of the population) than Internet banking (16%). First National Bank (FNB) claims that it alone processes more than R1 billion mobile banking transactions a month.

Mobile solutions have a role to play in most South African and African businesses – be it as a means to improve internal efficiency or a way to communicate with a large customer base cost-effectively, says Len Pienaar, executive responsible for product development at Clickatell. “If you're not playing in the mobile space, you're not playing in



MOBILE AFRICA – the vital statistics

Mobile penetration across Africa stands at 42%, but only 8% of the continent's people have access to an Internet connection. Africa recorded annual growth in mobile subscribers of about 47% between 2003 and 2008.

Source: The International Telecommunications Union

Africa,” he adds. Executives need to understand mobile technologies and mobile customers to make the most of what is becoming an increasingly powerful channel to market throughout Africa.

Not only is the penetration of mobile devices into the market continuing at a fast rate, but so is the richness of the functionality that these devices offer. One of the most important trends taking place in the market is the convergence of a range of features and functions on cellular handsets, says Martin Butler, senior lecturer in Information Systems Management at the University of Stellenbosch Business School.

Today's 'smartphone' is more than a mobile telephone with some basic text messaging functionality. It also allows end-users to browse the Internet, find their way around town using global position satellite (GPS) navigation, send and receive email, take high-quality digital photos, and more, says Butler.

At the same time, new computing devices such as netbooks, mini-notebooks and tablet

devices like the Apple iPad are emerging, he adds. Computer vendors such as Apple have moved aggressively into the smartphone market, while cellular phone vendors like Nokia are starting to release products that compete with netbooks and notebooks from PC manufacturers.

This trend is causing the pricing for Internet-access devices to fall rapidly. At the same time, high-speed wireless and mobile Internet networks are proliferating throughout South Africa and many other parts of the continent. Wi-Fi networks are becoming increasingly common in shopping centres and hotels, and cellular operators are rapidly rolling out high-speed networks based on technologies such as HSDPA and HSPA+.

Given the selection of high-tech options that are available, many business leaders are tempted to implement solutions that are based on the latest technologies such as wireless application protocol and other mobile Internet technologies.



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IT'S A WIDE, WIRELESS WORLD

Market research firm, Gartner, projects that mobile phones will overtake personal computers (PCs) as the most common Web-access device worldwide by 2013. There will be more than 1.8 billion browser-enhanced cellphones and smartphones in use worldwide by 2013, compared to 1.78 billion PCs. The market researcher predicts that by 2014 there will be a 90% mobile penetration rate across the globe and 6.5 billion mobile connections.

But the key to the launch of a successful mobile service or product in Africa is understanding the customer and his or her needs, says Pienaar.

Penetration of high-end handsets supporting full Internet browsing is still relatively low in South Africa and other parts of the continent, he adds. That means that many of the most successful solutions will be those that use technologies available on even the most basic handsets – for example, SMS messaging and Unstructured Supplementary Service Data (USSD). However, one should craft solutions that accommodate both high-end and low-end users, Pienaar says.

Butler agrees that level of penetration of smartphones into the low-end of the market should not restrict use of cellphones as a channel for interacting and transacting with customers. Many

poorer South Africans already use their basic handsets for prepaid airtime and electricity purchases, for example.

The next step will be to use mobile phones as a platform for more complex electronic transactions. Already, mobile banking initiatives such as Zap, M-Pesa and Wizzit are helping to bring financial services to more of Africa's unbanked people.

Future advances in mobile payment, commerce and banking will make it increasingly easy to transact electronically using cellphones and the mobile Internet, says market researcher Gartner. This trend will play a major role in creating a situation where a significant majority of the world's adult population will be able to transact electronically by 2014. **a**

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KENYA'S MOBILE MONEY REVOLUTION

Mobile technology is helping to bring affordable banking services to Africa's unbanked from South Africa to Tanzania. Perhaps one of the most successful examples of a mobile banking service is M-Pesa in Kenya, a service rolled out by Safaricom, one of the country's leading mobile operators.

The M-Pesa solution was initially developed by Vodafone – one of Safaricom's shareholders – as a way for borrowers to pay back conveniently and receive loans from microfinanciers. But users started adopting it for other banking transactions and the service was re-focused to allow users to send and receive remittances and make payments to other M-Pesa customers. M-Pesa customers can deposit and withdraw money from a network of agents that includes airtime resellers and retail outlets acting as banking agents.

By early 2010, M-Pesa had more than 8 million users across Kenya. The service has been launched with varying success in other markets such as Tanzania.

Zain, one of Vodafone's rivals in Africa, has also launched a similar

service called Zap in countries such as Kenya, Tanzania and Uganda. Zain claims that more than 10 million people have used Zap.

As a research paper from Gunnar Camner and Emil Sjöblom at the Royal Institute of Technology in Stockholm shows, the solution isn't perfect. The authors note that M-Pesa did particularly well in Kenya, partly because of Safaricom's hard work, and partly because the country's culture and overall sociopolitical structure favoured the solution. Adoption in Tanzania has been considerably slower, for example.

As important as payment and remittance services are, innovative loans and savings products are what many African countries need in order to lift more people out of poverty, the researchers add. What's more, only 30% of Kenyans using the service were previously unbanked.