

The Future is Truly Mobile

Mobile technology is no doubt one of the most explosive developments ever to have taken place in the world. It offers enormous advantages—added convenience, greater personal security and the ability to take advantage of ‘dead’ time to do business on the move. Zachary Ochieng explains.

In an increasingly time-pressured business and personal environment, the ability to work in what was previously ‘dead’ time is more important both for productivity and work-life balance. For some, work is no longer just somewhere to go to, but something they do, wherever they are. In the world’s poorest and richest countries alike, mobile technology is touching heights these days and the small device is offering a lot to the users other than making and receiving calls. With a new platform of smartphones in the market, this technology is giving a tough time to the other fields of advertising and marketing.

Ultimate platform

“Mobile phone is the ultimate platform for various companies to market and advertise their products”, says Rene Meza, Managing Director, Zain Kenya.

According to Meza, mobile advertising is an effective and more result-driven form of marketing, given that users can be away from their computers but still be able to do business since they have mobiles in their hands most of the time.

Mobile marketing is blooming at a much faster rate as compared to the other forms of marketing. A recent study conducted by A-1 Technology, a leading New York- based software company, estimates that the world market for mobile marketing and advertising revenues will reach nearly \$50 billion by 2014, up from about \$29 billion today, growing at a five-year Compound Annual Growth Rate (CAGR) of nearly 12 percent. According to the study, 2010 is expected to be a decisive year for mobile marketing spending, as marketers worldwide move from disillusionment over their expected return from this platform to the realization that they can indeed enhance consumer brand equity via the targeted precision and customized experience that mobile affords over other media placements.

New form of marketing

“Many companies are using this new form of marketing to enhance brand awareness and increasing sales effectiveness. It has changed the ways of many users as they use their phones to search and sometimes, even, buy the products and services. People often receive some kind of advertisements on their mobiles. These advertisements come in the form of SMS, MMS and calls”, says Meza.

One of the important things about mobile marketing is that it is the cheapest means of advertisements. Companies need not to invest huge amount of money for advertisements through mobile marketing. To a very great extent, operators have come up with bright ideas.

“If a company does not have a budget for TV advertising or printing fliers that is too expensive, nowadays the trend is to use SMS which is quite cheaper and reaches a mass market”, says Amit Patel, Head of Sales and Marketing, Samsung Electronics, Mobile Division.

According to Patel, you might be anywhere but you would keep on receiving such form of advertisements. SMS and messaging continue to dominate as the vehicles able to interact with the largest portion of the installed base for mobile phones. Patel says that most of the companies around the world are turning their marketing objectives towards the widespread mobile marketing. Companies are using all manner of lucrative methods to attract the buyers from various segments. If they are targeting kids, they can place their advertisements in mobile games or sponsored videos.

Economic growth

According to Meza, mobile penetration enhances economic growth to substantial percentage points, resulting in the creation of employment opportunities. Kenya's Information and Communications Permanent Secretary Bitange Ndemo concurs.

“Greater penetration of mobile technology has been found to greatly contribute to economic growth. Like everything else, it comes with some negatives when it gets used by criminals to extort money from innocent people. However, it has by far greater benefits than the negative aspects”, Ndemo asserts.

Engineer James Rege, Chair, Kenya's Parliamentary Committee on Energy and Communications says business transactions, especially those involving financial services are now taking place a lot faster.

“Communication between banks and clients is now made easy. With mobile technology, crime investigation has also become faster. However, he adds that in Kenya, theft of handsets is on the rise while some people use mobile phones to send threatening messages to their perceived opponents.

Mickael Ghossein, CEO, Orange, says mobile technology has made doing business easier.

“Today, I am able to read my email and transact other business while stuck in the Nairobi traffic jam. The mobile has become a great commodity for doing business. Now you can easily be reached whether you are out of office. You can be in touch with your colleagues whether you are on holiday. It also increases business value. Without the mobile phone, you can lose a lot of business”, says Ghossein.

Harry Chager, Chief Executive Officer, Computer Revolution Africa agrees mobile technology has had a tremendous impact on business. Citing Safaricom's M-Pesa and Zain's ZAP m-money transfer services, Chager says many people are now able to send and receive money without the trouble of visiting banks. According to him, this has made life much easier.

“I have actually seen farmers and fishermen calling different markets beforehand to find where they can get the best prices for their produce and fish”, Chager says.

People becoming more productive

He says that with convergence, people are becoming more productive as they are always working. But there is also the flip side.

“Whether you are sick at home, someone will definitely get you. It actually curtails your freedom and private life”.

Samsung’s Mr Patel shares the same sentiments. He argues that while the mobile phone was considered a status symbol a few years back, it has now become a necessity as people need to work even when they are away from their offices.

“Handset manufacturers are currently making phones with email capabilities. Our company is also catching up. With business phones, our life has become busier than ever. For example, I have a Windows Mobile handset and I do work even at 2:00 am when I am at home. The good part is that I cannot lose any business opportunity”, says Patel.

However, Patel says that it at the same time disrupts family life.

“Personally, I reply to emails at 1:00 or 2:00 in the morning because I never switch off my phone. People who know I own a business phone take advantage of this and do not mind communicating with me at any time”.

John Arudo, Regional Research Co-ordinator at Aga Khan University’s Advanced Nursing Studies Programme, concurs:

“People with smartphones work throughout, except when they are sleeping. These days people no longer enjoy their leave because they keep receiving phone calls all the time”, says Arudo.

But mobile technology has also positively influenced the social aspects of the users. Gerard Brandjes, Nokia’s General Manager for East and Southern Africa says that as the mobile device and the Internet industries converge, the way people communicate, share, search and use content changes.

“There is a blending together of advanced mobile technology, personalised services, and contextually relevant content to create a unique and compelling user experience. This is what mobility is all about now: creating a unique and compelling user experience. Social location is bringing real world to the Internet. With social location we mean the possibility for us to see the important people and services around us – and to be able to connect to them instantly”, Brandjes avers.

Ability to provide entertainment

Besides communication, mobile technology has also the ability to provide entertainment.

“Now that mobiles have become media consumption and creation devices, people expect that they can store their media to the PC...or that they can access their content via mobile or desktop web browser... People want everything to work seamlessly no matter which device they have at hand and wherever they are. This is the whole approach with Ovi services : to enable people access their mail, music, maps, photos, and connection to their favourite social network sites through one portal”, says Brandjes.

It is instructive that social networking is driving new communications and web behaviour and giving real world dimension to the Internet .

“People want to bring their physical and online worlds together via the Internet. Sharing our personal content – photos, video, conversations, contacts and files – is getting easier and more intuitive. This marks an exciting crossroads and one that is central to the mobile technology's and Nokia's future as well. Nokia announced the Ovi by Nokia partnership with Facebook. With Ovi, instant ‘lifecasting’ of content to social networks from the homescreen is now possible. For instance, lifecasting allows people to publish their location and status updates directly to Facebook, wherever they are. This partnership also makes it easier to discover, sign-in and connect to the Facebook community”, Brandjes observes.

In the education sector, Nokia is providing leadership through *Bridgeit* in using convergence as a platform for learning for children in developing economies, many of whom lack access to basic learning materials. *Bridgeit* is a unique convergence of mobile telephony and satellite technology designed to deliver digital multimedia learning materials to teachers and students who otherwise would not have access to them. *Bridgeit* works by enabling teachers to use mobile phones-sending a simple SMS to access a library of Science, Math and English videos. Once selected, videos are downloaded via satellite to a digital video recorder connected to a television in the classroom.

Education through technology

Nokia, in collaboration with other partners, agencies and organisations launched *Bridgeit* Tanzania, an Africa pilot of the *Bridgeit* programme. *Bridgeit* Tanzania, locally known as *Elimu kwa Teknolojia (Education through technology)*, seeks to facilitate creative and quality classroom instruction through the innovative use of cell phone and digital technology with the desired outcome of increasing achievement of primary school children in the areas of Math, Science and life skills. Supported through a grant from the United States Agency for International Development (USAID), *Bridgeit* Tanzania is implemented by a dynamic alliance comprised of the International Youth Foundation (IYF), the Tanzania Ministry of Education and Vocational Training (MoEVT), Nokia, Nokia Siemens Networks, the Nokia Institute for Technology (INdT), Pearson Foundation, the Forum for African Women Educationalists (FAWE), and Vodacom Foundation. The project, launched in 150 schools in April this year, has already reached more than 15,000 students and 300 teachers.

Stakes in citizen journalism

The growth of mobile technology has also raised stakes in citizen journalism- the act of individuals playing an active role in the process of collecting, reporting, analyzing and publishing news. Thanks to tremendous progress achieved by the General Packet Radio System (GPRS), the wireless communication protocol, it is now possible in Africa to send articles and images (still and moving) to someone else without using a computer and without having a traditional Internet connection. The mobile reporters only need access to a cell phone tower, a GPRS enabled phone and some credit.

One media agency which has benefited immensely from this technology is AfricaNews (www.africanews.com), the Netherlands based interactive online publication, which is currently working with mobile phone reporters. The mobile reporters cover current events in their areas, using the mobile phones to produce video footage, written reports and photographs. With this innovative project, African citizens - from the sprawling metropolises

to the most isolated villages – can let their voices be heard across the continent and around the world.

It is noteworthy that some of the big stories happening around the world have been broken by citizen reporters as opposed to the traditional media.

Ready for number portability

As the mobile industry grows, debate has been raging whether the region is ready for number portability. According to Meza, number portability is a concept which can work, though it has not been advanced in developing countries.

“If it works, it will allow mobile operators to leverage on their key competitive advantages . For us as Zain Kenya, this will mean affordable services. However, people are still very attached to their numbers. Provided that it works, it will benefit smaller mobile providers in the market and allow consumers in general to choose which mobile provider they want to be attached to at any given time”, says Meza.

Still, Meza says the region has a long way to go as there are a lot of challenges, including the fact that it requires heavy investment to implement systems, processes and solutions to support it. The second biggest challenge is that normally key mobile operators are against it because the smaller players can leverage on their weaknesses and try to attract more customers.

“I think we are still not ready but when fundamental processes are put in the right way, number portability may eventually be a success in East Africa”.

According to Brandjes, number portability is another initiative which gives consumers choice and therefore should be welcomed.

“Indications from other markets where number portability has been introduced show negligible to no impact on handset demand. Many consumers may still choose to have more than one operator SIM connection to suit their individual needs”.

Ndemo says Kenya, in particular, will be ready for number portability early next year.

According to Ghossein, this is the right time to introduce number portability, considering that Kenya is the region’s hub, not to mention the landing of the fibre optic cables.

“I believe the market is ready since all the operators now have good coverage. It would not make good business sense to own multiple SIM cards because the person calling you may not know which one is in use. But with number portability, you can retain just one number while having the flexibility to move to the operator offering the best tariffs”.

Ghossein also argues that number portability will level the playing field between the dominant operator and smaller ones.

Commendable job

But is the regulatory environment in Kenya conducive for mobile operators? According to Meza, the Communications Commission of Kenya (CCK), the industry regulator, has done a

commendable job. Meza is full of praise for the CCK Director General Charles Njoroge whom he says has made a lot of positive changes since his appointment. One of them is the introduction of the Dominant Player Framework, which will allow smaller mobile operators to become much more competitive .

“The fact that 3G spectrum costs will be reviewed to allow smaller mobile operators who can not afford to lay a \$25million spectrum will help in the development of telecentres and become much more competitive”, says Meza.

Operators paying high taxes

But challenges still abound. According to Meza, Kenya is one of the countries which taxes telecom operators heavily.

“We are currently paying 26 percent of our revenue as tax. That will increase by 1 percent in 2010 with the introduction of the Rural Access Fund, in which the Government has applied an additional 1 per cent tax for rural development”.

The second challenge, according to Meza, is that Kenya’s economy has not been performing at par with that of Uganda and Tanzania, more so after the 2007-2008 post-election violence which has caused a lot of pressure on consumer demand.

“In an economy where 60 percent of the population live below the poverty line, the priority for those people is not mobile phone airtime but food”, Meza observes.

Nevertheless, that has not dampened his spirit. Zain recently invested over \$75 million to spur its growth hoping that Kenya’s economy will soon emerge from the doldrums.

While concurring with Meza on the high licence fee charged by Kenya compared to other countries in the region, Orange’s Mr Ghossien adds that availability of qualified technical staff is another challenge.

“The challenge we have currently in Kenya is lack of the right staff to run the networks. As technology changes, you need the best staff to run the networks . We are moving from analogue to digital and finally going to IP. This requires the right human resource. The questions: do we have in Kenya the right human resource to support the technology evolution? Do we have in our universities the right training to supply the right human resource to the operators to cope with the new technology?”

Ghossien however acknowledges that lack of skilled personnel is a global phenomenon.

Still, he sees cable or network vandalism as another challenge and appeals to the police to take charge.

“Vandalism is a nightmare not only for Orange but other operators. We cannot officially say it is due to sabotage, though we can’t rule that out. It could be a case of both sabotage and vandalism. In a manhole that contains cables of various operators, you may find that only those belonging to one operator have been cut and the rest left intact. How else would you explain this?”, he poses.

Share of teething troubles

But like most nascent technologies, mobile telephony is experiencing its share of teething troubles, including concerns about environmental impact, health and safety. The massive roll out of the infrastructure has led to the construction of numerous base stations, masts and towers to support the antennae for cellular mobile, mobile radio, broadcast transmitters and other related wireless communication services. However, the massive deployment of network infrastructure has come at a price. Notably, concerns abound over health and safety effects, especially those associated with exposure to electromagnetic emission from these towers and base transceiver stations. It is against this background that in 2008, CCK established a Standing Committee on siting of communication masts and towers, following complaints from various residential associations.

Some industry analysts and players argue that sharing of infrastructure would control environmental pollution.

“Infrastructure sharing is something we see in a positive way. Already we are sharing infrastructure with mobile operators, radio and TV operators. It is not a new concept for us. It is something we have been doing over the past few years. It is a good way of optimising costs and investment, besides taking care of the environment”, says Zain Kenya’s Mr Meza, adding: “It is an initiative that benefits operators from the investment point of view while also protecting the environment from pollution”.

Ghossein couldn’t agree more.

“I believe it is a very good idea which can work very well in Kenya. It will reduce the cost of doing business while at the same time helping to protect the environment”.

Infrastructure sharing is in place

Ndemo affirms that the ICT policy of infrastructure sharing is in place, though some operators continue to see infrastructure as a competitive edge. Section 5.10 of the Kenya ICT Policy envisages infrastructure sharing and states thus:

“The Government will promote sharing of natural sites, physical infrastructure and co-location of ICT facilities by licensed operators.”

Rege acknowledges that though his Parliamentary committee has never addressed the issue of infrastructure sharing, his personal feelings are that it should be encouraged, if not enforced, and the savings passed on to consumers. But he also fears that untrusted network operators will, however, not be frank enough to declare how much they are saving through infrastructure sharing.

Computer Revolution Africa’s Mr Chager also supports infrastructure sharing.

“When we set up office in Uganda 10 years ago, MTN was the company with the main infrastructure and it used to share it with other operators, at a fee of course. With all these operators now coming up, we would destroy our environment if each one of them sets up their own infrastructure”, Chager argues.

Indeed, infrastructure sharing is a concept that the International Telecommunications Union (ITU), is advocating for, especially in the face of the global economic meltdown. In its 2008 annual report-- *Trends in Telecommunication Reform 2008: Six Degrees of Sharing*—ITU sees infrastructure sharing as conducive to the development in the ICT sector.

“Sharing strategies are increasingly necessary to ensure that operators can deploy their networks at low cost while guaranteeing that consumers have access to affordable services,” said Sami Al Basheer, Director of ITU’s Telecommunication Development Bureau. “Now, more than ever, sharing strategies make sense as operators are forced to reduce the costs of network deployment as they compete for scarce investment funds. This is a forward-looking perspective in light of the current financial and economic uncertainty.”

With regard to health and environment, Patel says Samsung phones go through various tests to comply with health and safety standards before being released into the market. He adds that awareness creation on eco-friendly phones is also imperative.

“Samsung is doing that starting from low to high end phones. We are also helping in conserving the environment in the rural areas. Samsung was the first company to endorse a solar phone in the form of E1107 . Though we were not able to launch it in Kenya, we did it in other parts of the world”.

Despite the advantages of mobile technology, complaints still abound over high interconnect charges. However, in Kenya’s case, Ndemo says the study guide on interconnect charges should be ready in January while the revised charges are anticipated before the end of the first quarter of 2010.

New regime for interconnect charges

Meza confirms that by early next year, there will be a new regime for interconnect charges based on the size of the operator. Those with a bigger market share will pay higher interconnect charges as compared to those with a smaller market share.

Rege says that once the number portability is executed, problems of high interconnect charges will disappear.

Complaints also abound over call drops and frequent breakdown of various operators’ systems, including Safaricom’s M-Pesa.

“Call drops is one of the quality issues that CCK is taking very seriously. Each operator is expected to meet certain quality standards. Regarding M-Pesa, the disruptions has been due to system upgrades. This is not bad considering that this is a fast moving sector”, Ndemo comments.

Rege says his Parliamentary Committee has made arrangements for a meeting with the regulator to answer questions as to why it has not put to use the expensive monitoring equipment to monitor call drops and call completion rates for both voice and data.

But the hiccups notwithstanding, the future of mobile technology in East Africa looks exciting.

“I am looking to a penetration rate of 75 per cent in Kenya before the next elections”, Ndemo enthuses. Meza says the future looks bright especially with the landing of the fibre optic cables.

“I think the arrival of the cables has completely changed the telecoms landscape in Kenya. Today if you look at the potential for growth, data has been growing four to five times faster than voice over the last couple of years. This will allow consumers to leverage mostly on the 3G technology.

According to Chager, the future should be very scary for children who are fond of playing truant. Parents can now keep track of their children using solutions such as Tramigoware and Google maps. With Tramigoware, a parent only needs to send an SMS to a child’s phone and will be told exactly where the child is.

“People are also keeping track of their vehicles using mobile phones. For instance, our vehicles are fitted with mobile tracking systems which are GPRS- enabled. By simply sending an SMS, you can stop the car”, says Chager.

Mobile technology is the future

But in terms of work, Chager says mobile technology is the future.

“The whole idea of mobility and Windows Mobile and Blackberry is giving access to your line of business wherever you are. Computer Revolution Africa is currently developing a solution where people can place orders through their phones while they are in the field, process incoming orders and even update payments. With Windows Exchange 2007 and 2010, if your phone is stolen, you can go to any cyber café and have it formatted by sending a command”.

According to Rege, the use of new Social networking tools such as blogging, facebook, twitter, etc are now on the rise and if employed in our institutions, government, parliamentarians and even public servants will play an important role in eradicating graft, improving transparency, dempocracy and good governance.

Ghosein says with the era of convergence, mobility is the way to go.

“You can now carry out financial transactions, book your bus and plane tickets straight from your mobile phone”.

Zachary Ochieng,
Managing Editor,
CIO East Africa magazine.
eDevelopment House,
Kenya
URL: <http://www.cio.co.ke>

