

11 ICT trends for emerging Africa

By [Sylvain Béletre & Russell Southwood](#) 14 Jan 2011

The ICT sector is one of the fastest growing on the African continent. Fueled by heavy investments, telecommunication infrastructures have improved drastically. Over the past five years, Africans have embraced ICT innovations fast especially in the mobile telecommunication and in the IT segments.



The next wave that is about to hit the continent will include new infrastructures such as broadband fibre optic cables and data centres, telecoms added value services and IT innovations. Here is a review of 2010 and key trends to prepare for 2011.

1. Africa now officially a new emerging market thanks to ICT demand

Over the past 12 months, there has been continued activity and interest in Africa despite increasing competition, particularly in mobile markets. For example, Orange has officially announced that Africa has become an important market for the future and MTN keeps investing everywhere on the continent. Two Indian carriers, Bharti Airtel and Essar have made key acquisitions in the mobile sector.

ICT growth - particularly within the mobile sector - has focused interest on the continent as a place with interesting emerging markets in North and sub-Saharan Africa (particularly South Africa, Nigeria, Kenya, Senegal and Ghana).

The telecoms and internet sectors in Africa have come out of 2010 with greater confidence but there's the nagging feeling that things will never be the same as they were in the earlier golden years.

2. More telecoms infrastructure investments

2011 will see renewed telecoms infrastructure investments, not only in mobile and satellite but also in fixed infrastructure including national fibre backbones and local data centres to meet growing demand.

Since going live in July 2010, capacity sales on EASSy, the 10,000km high speed fibre-optic cable connecting southern and eastern Africa, have outstripped initial forecasts. As a result, WIOCC, the largest shareholder in the cable, has announced that the system will be upgraded in 2011 to more than double its current capacity. Operators such as Econet Wireless Zimbabwe will invest additional money on expanding and upgrading their networks.

Operators of all kinds ramped up their bandwidth requirements considerably in 2009, some by as much as ten times as they finally got their hands on even cheaper bandwidth on Africa's east coast. So, for those selling international bandwidth, 2010 was inevitably a somewhat quieter year. The steady downward cascade of retail internet prices was slower than might have been anticipated but it's begun to happen.

Africa, too big to dominate

Coming out of dealing with over-staffed and unreliable incumbents, it was hardly surprising that mobile operators did not trust others to do things like provide network infrastructure for them. So a number of mobile operators have poured money into acquisitions and fibre network roll-out. But 2010 will probably go down as the year when many companies realised that it was not possible to dominate the national or international fibre space in Africa: it's just too big and will cost too much.

Year 2010 saw the arrival of the EASSy and Main One cables. [Main One looks set to extend itself to South Africa](#).

O3B will not start its service until the first half of 2013, well after all the remaining international cables (WACS and ACE) are finished. Prices for international fibre keep coming down, although it's happening more quickly on the east rather than the west coast of Africa. With some exceptions, satellite operators and resellers are either reporting some degree of revenue loss or through gritted teeth saying things are "holding steady."

MWeb has landed SAT-3 cable capacity in its Cape Town node, after the internet service provider was affected by Seacom's downtime in July and announced that it would source additional capacity. It says this forms part of its ongoing bandwidth capacity upgrades and brings a degree of resilience to its network.

Read: [Satellite to fibre - Africa's big change is really under way](#), says new report and [The imminent arrival of "fibre heaven" in Africa spoiled by a number of nagging questions](#) on www.balancingact-africa.com.

3. New race for spectrum ownership

Another trend to watch is the start of a potential war for spectrum. Several telecoms licences need to be renewed and ICT regulators will start to call for bids. However, the market has become much more competitive, margins have dropped and we hope that licence fees will reflect this difficult context. Particular pressure is coming from both the introduction of WiMAX and before too long LTE (Kenya's Safaricom is testing it and Vodacom says it's on their road map).

Kenya's regulator CCK may yet be a trend-setter in saying that it will review downwards licensing and spectrum fees for a commitment from operators to extend coverage to rural areas. However, spectrum will be auctioned so we await the outcome with interest.

4. More mergers and acquisition and partnerships

2010 saw some interesting deals including Bharti's acquisition of Zain's assets in Africa back in March 2010 for US\$9bn. African operators have remained focused on cost control which has driven some cost sharing examples.

At Africom, there was much talk of Bharti Airtel's focus on its OPEX costs through outsourcing and its ambitious plans to make an impact on several different parts of the industry outside of their own operation: Their focus on the cost side of the business will affect all operators and 2011 may be the first year in which we see mobile casualties. They won't go bankrupt but be quietly absorbed by their competitors for less than stellar deal prices.

As competition and the need for more revenues increase, Balancing Act expects strategic partnership between operators, vendors and even TV players. The most successful players will be the ones who form

alliances with key players in the equipment, IT, content providers (ie. media companies, especially audiovisual) to offer a wider range of services to their customers. Affordable bundled packages, especially multi-play will start to emerge in the most advanced African countries.

Creating a national structure

If at an international level you can create a structure several companies will trust, why not at a national (or indeed cross-border) level? The approaches may differ between small markets (with an SPV like the Burundi Backbone System) to more informal alliances over trench digging as has happened in South Africa. We also expect more sharing of tower infrastructure between telecoms operators. (Read: [Tower sharing could save mobile operators "north of 20%" in costs](#), says Eaton Towers CEO).

The second, more virtual alliances (think airline service companies) are where several companies are able to offer a single branded service to move traffic around the continent: in other words, putting together the bewildering jigsaw puzzle of fibre network that is coming into existence so that it can work in some more unified way.



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5. Demand for new models, technologies and apps

Niche competitors may yet have a more successful service focus than the "do-everything, control everything" big company. Operators and governments will have to choose between several complex and expensive technology upgrades (LTE, Wimax, 3-4G).

On the enterprise side, technologies such as cloud computing and virtualisation will disrupt old models and help companies cut costs or improve productivity and efficiency. Business analytics will shape new IT strategies and support further growth. (Read: [Africa's Cloud Computing: what will it take for it to become big across the continent?](#)).

Areas like the Maghreb, South Africa, Kenya, Ghana and Senegal will drive cloud services adoption on the continent. Large enterprises and government organisations are expected to deploy IT projects using those technologies.

Read:

- [Creating the right weather for Africa's services and applications entrepreneurs - new money and opportunities open up](#)
- [AfricaCom 2010 - Bigger than ever but wide-scale changes as the industry seeks to absorb changes](#)
- [AfricaCom: Africa's mobile industry needs to re-invent itself to meet tomorrow's challenges](#) and
- [Time is ripe for African innovators in the online services and apps market to up their game.](#)

As a consequence, Orange has recently set up a new technocentre in Abidjan to better understand local needs.

6. More ICT equipment

As with telecoms services spending, IT spending is expected to grow by around 10% across the African continent. IT investments in the public and private sector are due to boost IT levels and standards.

As prices drop, smartphone and tablet (ie. iPad and cheaper alternatives from Asian manufacturers) demand will lead to more growth, but also to more content and application creation. Their adoption will spread like wildfire across Africa.

As submarine fibre optic cables extend further from landing stations to key cities, enterprises, and within five years from now, households will start equipping themselves with modems, IP phones and multi-play boxes.

Read: [Launch of Samsung's Galaxy Tab will spark the beginning of device wars with Africa's mobile operators offering tablets.](#)

7. More local content

The demand for more broadband and what it can deliver to Africans has become a reality, especially among the young generation. More broadband subscribers are expected to generate more local content in the shape of text, audio and video.

As attention shifts from building networks to providing service and applications to African users, there are some big challenges ahead. Thus far Africa's mobile operators have loaded the dice too much in their own favour in terms of revenue splits. They have also not really paid enough attention to how content can be developed in the medium- to long-term as smartphones and feature-rich phones replace handsets offering basic SMS. The operators will protest that they take the percentage slice they do out of the value chain because they do all the marketing and there's more than a grain of truth there: few African content providers have built well-known brands or have the money to do so.

Apps appear to offer a tantalising way of African developers generating enough money, both on the continent and elsewhere. But a number of key players are suspicious of proprietary apps and fear the inevitable consequence of Africa's larger mobile operators sitting astride the market with their own app stores. Africa's not facing this problem alone as it's part of a bigger global issue but money makes things harder in Africa. The top YouTube channel generated millions and millions of views but its operator got the princely sum of just over US\$120,000 for his troubles: this is no way to finance a content ecology. Since it's either going to be advertising and/or pay-per-view/use, this is something Africa will again perhaps have to find innovative ways of tackling this issue in 2011.

8. New web strategies:

Large players have invested in their new web strategies and [encouraged content production across the African continent.](#)

Local organisations in Africa will need to further invest in their websites to get wider visibility if they want to attract more clients and partners. Some government organisations, especially telecoms regulators will be required to provide more transparency about their market and will need to improve their web visibility with up-to-date information. This will further attract investments.

We have also witnessed the creation of new webTVs covering various angles of the African continent,

requiring more local bandwidth and storage.

9. More applications

As ARPU has been decreasing over the past few years, telecoms service providers are looking for ways to increase margins with new applications.

However, operators are still not wholly confident about new markets like retail household broadband and mobile internet. After years of selling premium price bandwidth to corporates, it needs a different mindset and attitude to branding and quality of service that is not yet completely in place.

Mobile networks in Africa - the most adopted - will give birth to new applications and will grow data revenue

The most obvious application technology will be mobile broadband. Read: [Open Innovation Africa Summit focuses on ways to expand the mobile internet market.](#)

The growth of mobile money applications will also drive more investments and more transparent transactions.

Read: [Orange Money nears critical mass in Cote d'Ivoire and will launch in all African territories by end 2011](#) and [M-Money reaches critical mass of users in East Africa - Where next?](#).

Combating falling revenues

Mobile money will also continue to help combat falling revenues with potential extensions into mobile commerce to purchase goods and solutions. Mobile phones as Africa's credit cards have gained critical mass and are now widely used. The next stage of development is the steady weaving of a web of relationships with merchants to accept M-Pesa everywhere from African supermarkets to the more traditional market stalls.

Beyond that, operators have to figure out a way to create seamless interconnection between the users of different M-Money systems. The problem's not a technical one but again an issue of mindset: mobile operators believe that they can somehow do better by themselves than with all the potential customers interacting. What might be born if the whole M-money proposition didn't sit so uncomfortably between the banks and the mobile phone companies, would be the phone as a credit card. Not the ridiculous spending limits found in developed countries but helpful modest credit amounts that can be paid back after a month that will iron out the ups and downs of life in the informal economy.

With the rising popularity of open mobile device technologies (ie. iPhone or Android), operators, developers and handset manufacturers will have to select the right smartphone platform strategy.

Read: [Africa's mobile market will go open access - it's not if but when and how it all work out.](#)

Emergence of open source

On the fixed network, the emergence of open source will also ensure further growth and business continuity

Operators and equipment vendors have started to focus on vertical markets such as e-x (e-government, e-health, e-learning) and LBS where there are still wide opportunities. Read: [Geo-location - The what of the](#)

[where is it begins to be the next apps wave in Africa.](#)

Some African countries like Morocco, Mauritius, Senegal and Ghana have established themselves as business process outsourcing (BPO) destinations. Others like Kenya and Madagascar may follow.

10. Better customer relationships

Fibre roll planned between now and 2015 along the African coasts will involve more aggressive efforts to attract customers, enterprises and service providers to join their networks. Operators will then need to establish strategies in order to keep them loyal.

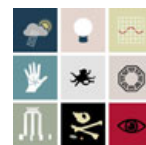
More competition is likely to lead to improved customer relationships, reinforced by better web management strategies. Operators have the opportunity to engage with social networking services to generate additional clients, traffic and revenues.

11. More ICT training

Lastly, the growth of more complex ICT usage will require more local competencies. IT security concerns and compliance will also generate new jobs and skills on the continent.

For more:

- Biz Trends 2011: [Marketing & Media Africa](#)
- Biz Trends 2011: [Marketing & Media South Africa](#)
- Biz Trends 2011: [Retail](#)
- Twitter Search: [#biztrends2011](#)



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