The role of ICTs in developing Africa

Work must continue to ensure that all Africans have access to the continent's rapidly growing network of mobile communications and broadband services

By Hamadoun Touré, secretary-general, International Telecommunication Union

In the 21st century, information and communication technologies (ICTs) have become ubiquitous. They now play an important role in the lives of almost every person on the planet. As truly transformational drivers of social and economic progress, ICTs have the potential to make the whole world a better place – and nowhere is this more true than in Africa.

Indeed, Africa has offered many of the best examples of just how transformative ICTs can be in terms of development over recent years, from the spectacular success of mobile banking in East Africa, to smart apps now being used across the entire continent for tracking and preventing malaria, to distance learning opportunities at every level of education, and to telecentres that help preserve and enrich the cultural lives of rural and remote communities.

ICT growth

As a continent, Africa has witnessed quite extraordinary ICT growth since the start of the millennium, particularly concerning mobile cellular communications. Back in 2000, mobile penetration in sub-Saharan Africa was under two per cent, and very few people believed that mobile phones would ever be anything other than a luxury for the wealthy few in rich urban centres. Today, however, mobile telephony is affordable and available right across the continent. The International Telecommunication Union (ITU) estimates that by the end of 2013 mobile cellular penetration in sub-Saharan Africa surpassed 63 per cent.

There has also been tremendous progress in internet access. In 2000, just one in 200 people in sub-Saharan Africa was online, but by the end of 2013 that proportion had grown to one in six people. Over the past few years, submarine cables have tremendously enhanced international connectivity for many African countries. The continent now has more than 10 terabytes of submarine connectivity around Northern Africa, about seven terabytes around Eastern Africa, and four terabytes around Western Africa.

The investments being made in infrastructure and services in Africa signify something far more profound than mere bandwidth; they represent renewed confidence and optimism in Africa's digital future.

There is no denying, however, that there is still far to go. More than 80 per cent of people in sub-Saharan Africa are still offline, denied access to the incredible wealth of knowledge and riches that the internet can bring into their lives. And even for those who do have access, it is still far too expensive, with mobile broadband costing 40-60 per cent of average income in sub-Saharan Africa.

Transforming Africa

In October 2013, ITU and the Government of Rwanda organised the Transform Africa Summit, to take stock of progress to date, and to set the agenda for the coming years. The summit was attended by seven African heads of state, 46 ministers and more than 2,000 participants. It focused on the theme of 'The Future Delivered. Today', encapsulating the tremendous spirit of hopefulness seen right across Africa now, which will help drive forward rapid social and economic progress on a scale never seen before.

The principal outcome adopted by the summit was the SMART Africa Manifesto and its implementation framework, the SMART Africa Alliance, both of which were endorsed by the African heads of state at the subsequent African Union Assembly in Addis Ababa, Ethiopia. The summit noted the extraordinary progress that has already been made, in large part due to solid and continued infrastructure investment. Indeed, participants have already surpassed the $55 billion committed in investment pledges at the ITU's Connect Africa Summit in 2007, and are now confident that the final total for the seven-year period will exceed $70 billion.

And, while improvements in internet access in Africa over recent years have

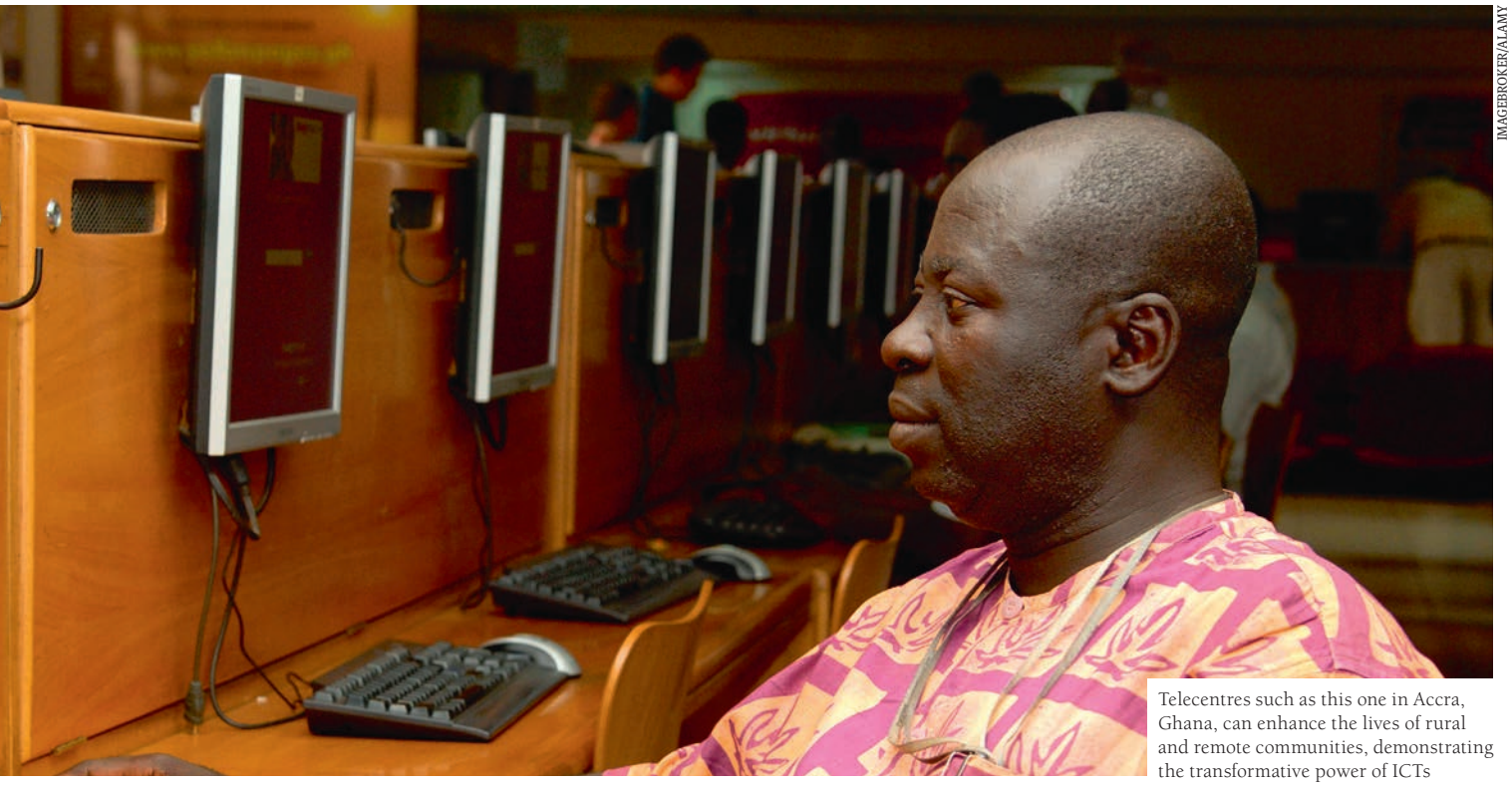
largely been confined to the capital cities, the very rapid spread of mobile data and 3G services is changing this very quickly now, with mobile networks bringing internet access to many areas outside Africa's main cities for the first time.

Rapid adoption of mobile broadband

Indeed, mobile broadband is the fastest-growing technology in human history. It took 125 years from the invention of the telephone to the first billion fixed-line subscriptions globally, and the world will probably never reach a second billion. But it took just nine years to amass the first billion mobile broadband subscriptions, and two more years to reach the second billion.

Africa has been incredibly quick to take advantage of mobile broadband, and is catching up with other regions faster than with any previous technological advance; mobile broadband penetration rates in sub-Saharan Africa coming into 2014 were already close to those seen in the Arab States and Asia-Pacific regions only two years earlier, at the start of 2012.

Clearly, the time is right for Africa to bridge the digital divide and step boldly



IMAGEBROKER/ALAMY

Telecentres such as this one in Accra, Ghana, can enhance the lives of rural and remote communities, demonstrating the transformative power of ICTs

into the hyperconnected future. ITU – the United Nations specialised agency for ICTs – has redoubled its efforts in Africa, and all three sectors of ITU (radiocommunications, standardisation and development) have been involved in projects across the region.

The agency has been particularly active in capacity building, regional harmonisation, broadband wireless, and the creation and maintenance of centres of excellence across the African continent.

Digital access for schools and hospitals

To give just one example, ITU and Craig and Susan McCaw's Broadband Wireless Network project for Africa continues to implement broadband wireless networks and develop ICT applications to provide free or low-cost digital access for schools and hospitals, and for under-served populations in rural and remote areas. The network is already operational in Burundi, and is being implemented in Burkina Faso, Djibouti, Mali and Rwanda.

In terms of training, the ITU Academy has trained thousands of Africans in areas as diverse as regulatory best practice, the digital dividend, internet exchange point (IXP) installation and fibre-optic training – and

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ITU has been working most recently with the administrations in Chad, Democratic Republic of the Congo and Gabon, as well as many other countries in the region.

The goal, of course, is to make sure that all Africans have access not just to mobile communications but also to the benefits of fast, affordable broadband services. I am encouraged to see so many countries in Africa working to adapt their policy and regulatory frameworks to the broadband world. This has been one of the very positive outcomes of the Broadband Commission for Digital Development, which was set up by ITU and UNESCO in 2010, to bring broadband to the top of the development agenda, as a means of helping accelerate progress towards meeting the Millennium Development Goals, as well as the new sustainability goals to be set post 2015.

Having seen the tremendous progress over the recent years, I am confident that Africa will seize the opportunity and employ the transformative power of ICTs to accelerate its development. It is very important to point out that those who are committed to Africa's development, including partners and investors, will be fairly rewarded.

I am also confident that ICT-driven Africa will be a place where people prosper, where communities enjoy strong bonds, where businesses thrive, and where governments enable strong and sustainable development as well as efficiently and effectively serving their people. ITU, for its part, will continue to be a place where African countries collaborate among themselves and with other regions to turn such visions into reality. I am proud of ITU's role in supporting Africa's ICT development. ■