

FACILITATING AFRICAN RENAISSANCE
THROUGH COMMUNICATIONS
INFRASTRUCTURE DEVELOPEMENT

BEING PAPER PRESENTED

BY

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TECHNOLOGY IS SHAPING GROWTH IN AFRICA

GREETINGS

It is with pleasure that I convey warm greetings from Nigeria to all participants at the 2008 Stanford African Business Forum.

I also wish to thank the organizers for inviting me to deliver a Keynote speech at this conference and for availing me this opportunity to discuss an issue that is of immense importance and has continued to attract the attention it deserves: that of how Technology can be employed in driving Growth and Sustainable Development in Africa.

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Abstract

Globally, Information and Communication Technologies (ICTs), have revolutionized all facets of human endeavor. This combination of digital technologies, computer and communication networks, and associated human capacity and ingenuity, is known to have delivered results in various critical applications and has even transformed the way we live today.

It is, therefore, agreeable that ICT is a proven universal tool for sustainable development. Today, ICT is imperative in the planning and development of nation and cities around the world. All nations must, therefore, avail themselves of the great opportunities offered by ICTs. Africa has recoded tremendous growth in some areas of ICT deployment while some others require urgent focus and attention.

INTRODUCTION

The first eight years of the 21st century have continued to witness an upsurge in the application and use of telecommunications and information technology in nearly all aspects of human endeavor. The wireless revolution, the Internet phenomenon, the broadband capabilities and the massive deployment of national and intercontinental optic fibre highways have accelerated global access to information resources and changed the way people live and transact business.

It is also note worthy that developing countries are now taking the lead in worldwide telecommunications growth. For instance, ITU reported in October 2003 that three out of four new phone users connected each year, in the previous four years, were in the developing world, and that growth in mobile is currently generated mostly in developing countries. This trend has continued even into 2008.

In Africa, the situation is now more encouraging than was the case before the dawn of the new millennium. Though the Continent still has a long way to go as

far as attaining sufficiency in Communications and IT infrastructure is concerned, there have been remarkable changes in the installation and uptake of basic mobile telephone lines in the last eight years.

ICT GROWTH AND AFRICAN RENNAISANCE

Only a few years ago, the African continent represented a region of major concern to the international community because of its inability to industrialise and embrace essential technologies that are required to facilitate economic development of the region.

Infrastructural facilities such as roads, transportation systems, public power supply, Communications and Information Technologies were inadequate in most of the 52 countries in the continent. Since modern infrastructure is required for sustainable economic growth, infrastructure inadequacy may explain the reason why Africa hosts the highest number of the least developed countries of the world, in comparison to other regions.

Two major infrastructure components I have identified as pivotal for Africa to improve its standing in the global reckoning are:

- ? Efficient and reliable public electric power supply and
- ? Pervasive, reliable and modern and Information and
Communications Technology

I personally believe that if Africa could get these two infrastructure components right, the rest will fall in line and the continent would firmly be on the path of major economic growth.

With respect to the ICT infrastructure component, the wave of Market liberalisation that swept across the world in the last decade has positively impacted the continent with several African countries opening up to private local

and foreign investment in the Communications sector. They have embraced market reform and liberalisation resulting in several notable success stories, thus providing useful examples for other developing nations to emulate.

In the last eight years, several African countries have been part of this revolution that has been propelled mostly by digital Mobile Services. With the licensing of competitive operators across Africa, the growth of these services has been geometric. In Nigeria, for example, an average growth of 6 million lines per annum has been recorded since 2001 and the annual growth rate is predicted to increase to over 10 million lines p.a. over the next 5 years.

Information and Communications Technologies have been widely acknowledged as presenting copious opportunities for the creation of unprecedented economic growth for Africa. Thankfully, most African governments have demonstrated the political will necessary to foster an environment conducive for investment in this sector. Most African countries have therefore progressed to a period of communications boom that is opening up new possibilities and frontiers across business, political, social and economic landscape.

Indeed there has been a revival in the telecom industry and history has been made. A recent report by Wireless Intelligence puts the mobile subscriber base in Africa at 280 million users by the end of March 2008. The African continent has thus surpassed North America in terms of mobile subscribers with US and Canada polling 277 million users only.

Wireless Intelligence also reported that Africa is the world's fastest growing mobile market today with 38% growth in 2007, putting Africa ahead of the Middle East 33% and Asia Pacific 29%.

Within continent, the Republic of South Africa had over the years maintained a lead as Africa's largest telecom market by subscriber numbers until January

2008, when Nigeria took over the lead as Africa's largest telecom market in terms of subscriber base.

TELECOMMUNICATIONS IN NIGERIA

By mid 2001, Nigeria had only about 400,000 connected telephone lines and just 25,000 analogue mobile lines. Total teledensity stood at a paltry 0.4 lines per 100 inhabitants. Connection costs were prohibitively high and waiting time for fixed lines ran into years. Mobile phone usage was only available and affordable to just a privileged few

Today, owing to several factors including government sector reform policy, a stable regulatory regime, the worldwide trend of rapid development in telecommunications and information technology and the huge potential of the Nigerian market, the story is now very different. Over the years, the NCC has licensed Digital mobile operators, Fixed wireless Access Operators, Long Distance Operators, Internet Service Providers, a National Carrier and Unified services operators; to promote competition in all segments of the market.

This open market approach has promoted rapid deployment of ICT services nationwide, resulting in exponential growth in the number of telephone lines. It is instructive to note that while connected lines only grew at an average of 10,000 lines per annum in the four decades between independence in 1960 and end of 2000, in the ensuing seven years from 2001 to 2008, an average growth rate of 6 million lines per annum was attained. As of end of March 2008, Nigeria had attained 45.9 million of (fixed & mobile) active-subscriber base. Total teledensity which was less than 0.4% (0.4 lines per 100 inhabitants) in 2000 soared to 32.8% by end of March 2007 (using the current population figure of 140 million). The active-subscriber figure is estimated to exceed 55 million by end of December 2008.

This growth in lines has been propelled by a boom in private investment in the telecommunications sector. In response to a favorable operating environment in Nigeria, the private sector players have invested over \$12 billion USD into the sector since February 2001. This represents a phenomenal increase in private investment from just about USD\$50 million as at 2000. Today, investment in the telecom sector ranks second only to that in the oil sector.

Increased competition in the market has also pushed down connection fees charged by operators such that fixed line connection costs now range from \$20 to \$100 in 2008, down from as high as over \$700 in 2000. For the mobile operators, the pressure of competition and market forces, has recently forced the operators to reduce their connection rates and today mobile connection is virtually free for anyone who can pay an upfront charge for minutes of call.

The emergence of digital mobile services has led to improvements in efficiency and productivity, reduction in transaction costs, increased service innovation and better quality of life. About 12,000 persons have been directly employed by the telecom operators and millions of Nigerians are benefiting from indirect employment generated by the operators. The explosion of telecom services has also created a new class of entrepreneurs who might otherwise have been unemployed. There is a nationwide network of dealers, vendors, sellers GSM accessories and the ubiquitous “umbrella-stand” operators.

Indirect employment has also been created through service contracts to construction firms, research companies, advert agencies, media consultants, etc. In the financial sector, enterprising banks have designed innovative products that leverage the use of mobile phones. The emergence of these large telecom companies, has also led to the return of significant numbers of Nigerians from abroad. These are professionals, who have acquired useful international experience and knowledge, and have been attracted back home.

The progress of the telecom industry in the last seven years is largely as a result of the liberalized market, but even in a liberalized environment, government still has a vital role to play in growing the nation's telecommunications infrastructure and ensuring a competitive environment that will reduce prices and make services more affordable. Government best serves the industry through the establishment of a strong regulatory body. In this regard, the role of the Nigerian Communications Commission has been to encourage competition, remove barriers to market entry, ensure interconnection of new operators with incumbents, monitor tariffs and quality of service, protect consumer rights and ensure the provision of telephone services for all.

The government of Nigeria is committed to positioning Nigeria among the top information-rich economies of the world within the next few years, and dedicated to providing the right environment that will attract more investment into the ICT sector.

Certain key technology areas such as wireless systems, optic fibre transmission systems and Internet/Broadband have been identified for particular attention. Digital Wireless and Mobile Communications Systems have helped Nigeria leapfrog into the circle of the world's top ten countries recording highest mobile subscriber growth.

Nigeria no doubt has cause to celebrate seven years of tremendous growth in the information and communication technologies sector. The celebration however, will only be full when all citizens have access to the vital tool of the information age. We must therefore continue to be aware of the scores of villages and communities in Nigeria that do not still have connections of any sort. They must not be isolated and deprived of the benefits of ICTs. We must strive to include all and exclude none, reach the un-reached and provide for the have-nots in our country. A special intervention vehicle, the Universal Service Provision Fund has been set up to address the peculiar requirements of rural areas, educational institutions and other identified areas of special need.

Telecommunications is an essential infrastructure of the information economy. Countries that lack sufficient access to modern telecommunications networks, find it difficult to be

effectively integrated into the global economy. The Nigerian government has therefore provided the right policy and regulatory environment to attract serious investors and encourage market forces to thrive, all aimed at attracting new sources of capital, accelerating network expansion, improving pricing, enhancing quality of service and introducing new technologies.

BENCHMARKING AFRICA WITH THE WORLD

We live in a global village where ICTs have a direct impact on a nation's ability to improve the economic well being of her people and compete globally. We must therefore ask ourselves how well we have fared in comparison with other regions of the world in providing access to this vital infrastructure for our people.

While African countries may be celebrating increase in access to and the use of basic telephone services, the more advanced countries are increasing access to new technologies such as internet and broadband at such an exponential rate. Broadband is no doubt an accelerator of social and economic development in the modern world with its applications enabling and facilitating economic and social services such as Public Safety, National Security, Telemedicine, E-government, distance learning, utility applications etc.

There is already a growing broadband divide between Africa and the rest of the world. There is therefore an urgent need to initiate national policies aimed at promoting ubiquitous broadband deployment.

CONCLUSION

One of the modern tools of human development is the application of ICTs in all the sectors of the economy. The effects of ICTs on economic structures are very visible today in most development initiatives. The way people live and carry out their business, economic and social activities is gradually changing due to ICTs.

Information and knowledge is greatly enhanced through timely and wide dissemination without the limitations of national boundaries.

Africa must therefore be a continent in a hurry to build a strong ICT infrastructure required to drive economic development and empower the citizens. Though some notable growth has been recorded in the sector, there still remains a lot to be done. We still need a pervasive fiber optic transmission infrastructure spanning across the whole of Africa. We still need a much higher penetration of internet and broadband facilities at business premises, educational institutions and homes. An information economy can only be built on a modern, solid and dependable ICT infrastructure.

Although ICT will not solve all the problems of sustainable development and socio-economic challenges, there is consensus that nations that fail to take the great opportunities offered by ICTs are likely to be left far behind in the global economy. The best evidence can be found in the widening gap between those Communities, cities, regions and countries that have embraced the information society and those that have not.

The growth recorded in the last decade in the ICT sector in Africa is commendable and must be sustained. What is perhaps more urgent is the need to work towards recording the same level of success in the Electric Power Sector. Availability of constant and reliable power supply to industries, businesses and homes is critical to Africa's future growth. It is the next revolution that must happen to give Africa its rightful position in the global ecosystem.

President Yaradua has this at the core of the seven point agenda of his presidency. This however needs to be an Africa-wide initiative and commitment to facilitate even development of the region.

Finally I will like to seize this opportunity to encourage those of you who have finished your studies here to consider going back home to join in the task of developing Africa. Some of you have relevant skills that are in high demand in your various countries. As stated earlier, there are quite a number of Africans in Diaspora that have taken advantage of the boom in the ICT and other sectors and returned home. They have been making great contributions in their various professional fields. I will be available to answer any questions that anyone may have on this subject.

Thank you all for your kind attention.

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At the 2008 Stanford African Business Forum
Stanford University, California, USA
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