

# IT Industry in Nigeria: Need for a Paradigm Shift

A paper presented at the Opening Plenary of the 2011 IT Professionals' Assembly

The Chairman,  
Distinguished Guests,  
Ladies and Gentlemen,

I thank you for the honour and privilege of addressing this distinguished assembly.

The IT Professionals' Assembly this year is especially pertinent as 2011 ushers in a decade where business growth will be highly dependent on the power of information technology (IT). We as a country are also at a turning point in our polity. With the recently concluded national elections, there is an air of optimism, coupled with hope of the majority of Nigeria's citizenry that this era will witness the birth of properly structured execution of strategic initiatives that will guarantee the sustained progress of our beloved country.

The post-global-recession era will present a vast array of new, IT-enabled growth opportunities for enterprises and new career opportunities for IT practitioners. Globally renowned IT research and advisory firm, Gartner, projects a 5.12% rise in global IT spend for 2011, up from 3.4billion USD in 2010, with a major part of this in telecommunications, particularly in the mobile services and devices segment<sup>1</sup>. The Information Technology (Industry) Association of Nigeria (ITAN) has estimated Nigeria's IT market at over 150billion USD, with projected growth of 10% over the global average.

In contrast to the optimism of projected growth in the IT sector are abject statistics on project performance:

- Only 32% of IT projects were considered successful, having been completed on time, on budget and to specified quality; 24% were considered failures, having been cancelled or unsuccessfully delivered and the remaining 44% were considered challenged – finished late, over budget and of substandard quality.<sup>2</sup>
- While there is no data available on project performance or IT project statistics in Nigeria, there is a long record of projects that failed to meet stakeholder expectations<sup>3</sup>:
  - The African Development Bank (ADB) cancelled 80% of its projects in Nigeria due to project failure;
  - Energo Nigeria Limited transmission substation achieved less than 5% implementation in 2008;
  - Abuja Investment & Property Development Company (AIPDC) lost about N3.8billion over four years as a result of failed projects.

The dismal statistics have led to the popularity of the saying: *"To err is human, but to really foul things up requires a computer."*

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<sup>1</sup> The 2011 Gartner Scenario: Current States and Future Directions of the IT Industry, January 2011 | ID:G00209949

<sup>2</sup> CHAOS Summary 2009 report from The Standish Group

<sup>3</sup> 234NEXT.com, February 2010

All of the foregoing raises valid concerns about how anticipated benefits of IT projects will be realized in 2011.

In Nigeria, the tendency is to engage the services of foreign firms and consultants to deliver key initiatives, often despite the Federal Government's regulations about local content and to the detriment of the local industry. There is need to protect our local IT industry. Only economies that protect their local investments record significant and sustained growth in any sector.

In view of the projected spend on IT, it is also pertinent to address the quality of personnel entrusted to handle such projects. As the quality of the project manager has direct impact on the success of project delivery, it is safe to deduce that the high incidence of project failure in our IT sector is not unconnected with the lack of requisite skills and experience of the people entrusted with project management and delivery. Either such skills and experience are lacking or the selection process fails to identify the right fit for the job.

In view of the foregoing, I would like to highlight key areas that need to be addressed, hopefully in the course of this assembly, to ensure the sustained growth of our IT industry.

## **Role of IT Professional Bodies**

Professional bodies all over the world play a key role in the quality of the relevant sector. Such roles include setting professional standards, knowledge management, and the promotion of professional development.

CPN needs to establish itself as an authority and gain recognition as a validator of professional quality in the field of IT. This is similar to the role played by other Nigerian professional bodies such as ICAN, ICSAN, etc. Membership of such professional bodies is often proof of authenticity of credentials and related quality of the registered professional. For corporate bodies, registration with a professional body should provide recognition of their compliance with professional standards in the areas governed by the professional body. CPN needs to provide that stamp of authenticity through certified processes of accreditation.

CPN also needs to establish professional standards and provide mechanisms to validate and revalidate members' compliance with those standards. This can be achieved through certification.

## **Skills Development for IT Professionals**

The quality of the Nigerian IT professional is often compared unfavourably with that of most foreign counterparts. There is a perceived lack of quality in the training available within the country, dearth of sophisticated skills and resultant poor quality of deliverables when indigenous IT resources are engaged.

CPN should be committed to providing opportunities for professional development. Organised programmes should consistently deliver value to members by providing opportunities to update technical knowledge through knowledge sharing with industry experts.

## Addressing Global Imperatives

The Nigerian IT sector cannot exist or develop in isolation. As the scope of international interactions continues to be broadened through the same IT, there is need for in-country initiatives to incorporate best practices and imperatives from the global level.

### 1. The Millennium Development Goals (MDGs)

In September 2000, world leaders came together at the UN headquarters in New York to commit their nations to a new global partnership and set out a series of time-bound target with a deadline of 2015. These targets are the eight (8) Millennium Development Goals (MDGs), and they form a blueprint agreed to by all the world's countries and leading development institutions.

All the MDGs have implications for IT either directly or indirectly. With only four more years to go, Nigeria needs intensified effort to achieve the targets, or face national embarrassment and relegation as an undeveloped country. IT can be leveraged to provide decent employment opportunities, particularly for young people. Education and health can be enhanced through proper application of low-cost IT to bring information and assistance to areas of low penetration.

The health sector in Nigeria has a large area for IT applications – cost-effective inventory systems for drugs and data management for patient health information.

### 2. World Summit for Information Society (WSIS) Action Lines

#### C1. The role of public governance authorities and all stakeholders in the promotion of ICTs for development

This action line includes initiating dialogue and national e-strategies, which role would be effectively played by the umbrella organization for IT professionals in Nigeria. CPN needs to increase its visibility by projecting itself as a partner of choice and a key player in implementing strategies for IT at local, state and federal government levels. By harnessing the synergies of its member professionals, corporate members and related bodies (ITAN, ITSPON, NCS, etc.), CPN could create groups to identify strategies for the use of IT for sustainable development, and related opportunities for partnerships among stakeholders using existing models for public-private partnership or multi-sector partnership, to deliver key project/initiatives to improve Nigeria's IT sector.

#### C2. Information and communication infrastructure

The Central Bank of Nigeria recently began identifying areas for shared services to bring down the cost of operations in the financial sector. This is in line with the CBN objective of promoting a sound financial sector, with direct impact on the cost of services for consumers. CPN is in a unique position to do the same for the IT sector in general. For any business, public or private organization to be economically viable in today's world, the effective use of IT is key. However, the present environment in Nigeria associates high costs with any IT initiative.

It is my hope that this assembly will address the use of cost-effective IT options to deliver affordable solutions for key areas of our economy. As a professional body of repute, CPN should endeavor to advise government and the Nigerian public about such investment opportunities that would take advantage of IT skills that are readily available in the country.

With the launch of submarine fibre-optic cables providing broader links to the Internet, there is an opening up of investment windows for complementary IT infrastructure to improve communications in the education, health, government and the private sector. There is also expected to be a corresponding drop in the costs of alternative channels such as broadband/satellite due to resultant unused wireless capacity.

**C3. Access to information and knowledge**

Nigeria needs avenues for dissemination of public-domain information. A large number of public institutions are yet to have fully functional websites. To a large extent, there are still unexplored opportunities for IT support (sites, tools, applications) for government-to-business and government-to-public access points.

**C4. Capacity building**

IT can be leveraged to provide solutions for almost all areas. It can be used to deliver education nationwide, provide support for healthcare workers and banking services for rural areas. There is thus need to improve ICT literacy in Nigeria. The curriculum for education at all levels needs to be revised to include relevant IT courses and the curriculum for Computer Science/Information Technology degree courses in universities is overdue for updating.

Federal, State and Local government workers need IT literacy skills and incorporation of e-literacy into existing libraries, community centres and any existing public access point. Private corporations could be encouraged to provide IT training centres as Corporate Social Responsibility (CSR) projects. This would in turn ensure availability of an IT-literate workforce ready for employment.

Domestic policies should be created to foster IT integration in education and training at all levels, including curriculum development, teacher training, institutional administration and management and life-long learning.

**C5. Building confidence and security in the use of ICTs**

There is rising global concern with IT security and the West African sub-region is seen as one of the most vulnerable areas. There is need to raise awareness on safe practices in the use of IT for homes (protection of personal information), businesses (protection of corporate information) and the government. Data and network integrity, existing and potential threats to IT, information and network security issues are just some of the areas that need to be considered, discussed and appropriate standards incorporated into professional practices within the country.

The proliferation of spam emails is increasingly a corporate problem, and points to the low level of information protection. When public email providers such as Yahoo! and Gmail seem to provide better spam protection than corporate email systems, it means that in-house IT security units are under-performing. IT professionals need to improve their practices to strengthen trust and security frameworks with appropriate guidelines and code of practice within their fields.

**C6. Enabling environment**

The effort of working group on internet governance (WGIG) was complemented in Nigeria by the responsibility accorded to NITDA (National Information Technology Development Agency)

to set up the .ng domain name registration, to validate Nigerian websites. The .gov.ng domain name registration became compulsory for Nigerian MDAs. All of this has provided some measure of security for the general public in interacting with dealing with public and private bodies via their websites.

There is need for the IT sector to actively promote user education and awareness about online privacy and information protection. The move towards a cash-less society means that increased volume of electronic and online channels for B2B and B2C services. Website developers and information/data systems designers need to incorporate appropriate standards for security, privacy and protection of information, and advise clients accordingly.

#### **C7. ICT Applications**

IT professionals in Nigeria need to improve their level of participation in e-areas: e-government, -business, -learning, -health, -employment, -environment, -agriculture, -science. Solutions for these areas are often developed or implemented by foreigners, with attendant barriers due to language and culture differences. The result is often projects that are only partly used or totally abandoned by stakeholders because they fail to support the processes for which they were designed.

CPN should aim to influence government policies to favor assistance to SMEs in the IT industry, as well as their entry into e-business, to stimulate economic growth and job creation – which will help achieve the MDG of poverty eradication.

#### **C8. Cultural diversity and identity, linguistic diversity and local content**

Promotion of our own unique and diverse cultural identities will help establish Nigeria's presence on the global IT and online forum. Online resources are largely unavailable in local languages, and vast opportunities exist for translation. If online information is made available in local languages, this would support the effectiveness of rural penetration efforts in the delivery of education, information and health services.

Indigenous knowledge capture and dissemination has vast implications for our university system, and collaboration with international development agencies in related fields. Local content can be most easily incorporated in the delivery of data management solutions at local government level.

However, there is presently a very low level of involvement of Nigerian IT professionals in such areas.

#### **C9. Media**

Incorporation of local content and promotion of cultural diversity is largely enhanced by the media. The convergence of IT and communications networks means that IT skills are now needed in development and delivery of media content. There is need to encourage skills development in relevant areas of IT, and employment of such skills in local programming.

IT tools can also be used to provide other related training and facilitate the flow of cultural content, particularly in the rural areas.

#### **C10. Ethical dimensions of the Information Society**

All stakeholders should increase their awareness of the ethical dimension in their use of IT. With increased access to information comes the need for increased security and protection of access to that information. The abuse of personal data resulting in spam emails, mobile text messages, online and mobile scams needs to be addressed by promotion of professional ethics and code of conduct among IT professionals, with appropriate sanctions for breaches.

**C11. International and regional cooperation**

Inasmuch as we seek to protect the local IT industry, this does not mean total exclusion of global IT influence. Indeed, there are situations that will require foreign IT expertise. Knowledge transfer to local IT resources needs to be emphasized, planned for and actively incorporated in such interactions.

IT projects should be given priority in requests for international cooperation and assistance on infrastructure development projects from developed countries and international finance organisations. This will build our local IT capacity through the resultant knowledge sharing with foreign experts and enhance Nigeria's role as a leader in Africa and West African sub-region.

A paradigm shift in IT industry in Nigeria requires a change in beliefs, values and references – a fundamental alteration of attitudes of industry players. There are examples of third-world economies that have been transformed through leveraging on IT. With Federal Government support for initiatives that will place Nigeria at a distinct advantage globally, the door is wide open for strategic improvement in the IT industry. It is my hope that this forum will provoke such a change.

I wish you successful deliberations.

Thank you for your attention.