INTERVIEW FOR DR. BABA JIBRIN ADAMU, SENIOR SPECIAL ASSISTANT (SSA) TO THE VICE PRESIDENT ON INFORMATION TECHNOLOGY FOR PUBLICTION IN THE NEXT NITDA MAGAZINE & OTHER IT MAGAZINES. SEPT 5, 2012

❖ Sir, you have held the strategic position of the Senior Special Assistant on Information Technology to the Vice President for two (2) years now. How would you access the sector in terms of advancement and development from when you came in and now?

Answer: Thank you very much for this opportunity. When we came in 2 years ago, the first thing we did under my office was the baseline assessment and analysis of the Information Communication Technology (ICT) sector in the Country. What we found was that Nigeria has in the past initiated several ICT related policies and laws in order to guide the development process of the sector and harness its full potential for economic growth, the reality was that the policies were disjointed and inadequate coupled with the absence of legal and regulatory frameworks; lack of unified regulations and synergy between existing ICT based institutions like the NCC, NBC, NITDA, NIMC, etc. Furthermore, there were duplication of projects and inappropriate costing and poor funding of projects and programs; and most importantly lack of proper M&E and R&D; plus the poor state of the nation's physical ICT infrastructure (particularly broadband) and lack of coordinated efforts to mobilize all Nigerians and fast track ICT penetration, access and affordability.

The analysis showed the urgent need for creating National ICT Policy to address these challenges in a concerted manner: the issues of coordination, framework for streamlining ICT sector, the issue of convergence, standardization, interoperability, cybercrime, access and social inclusion, job-creation and building a pre-eminent innovation and offshoring hub in Nigeria, development of human capital, global ICT standards into public procurement activities, provision of critical key infrastructure toward socio-economic development and transformation of Nigeria into a knowledge base economy, etc.

President Goodluck Ebele Jonathan who knows that there is a direct correlation between the use of ICT and positive macroeconomic growth; and in his desire to promote and develop ICT through addressing the challenges I just mentioned and in his plans to leapfrog from a resource dependent to a knowledge based economy set up a Presidential Committee to develop a Master-plan and Roadmap for the implementation of Information Technology for National Development. The Committee was chaired by the Vice-President, Architect Mohammed Namadi Sambo, which recommended creating flexible and robust standards, taking into account convergence and interoperability for the Nigerian ICT sector in order to create jobs and accelerate global competitiveness in line with Mr. President's Digital Transformation Agenda. This led to the creation of Ministry of Communication Technology (MofCT) bringing all ICT related service Agencies and Department under it in order to avoid duplication of ICT projects, harmonize MDAs ICT related online activities, build redundancy, create jobs, develop action plans and specific implementation

guidelines as the need may arise. Presently, the Ministry, under the Hon. Minister Mrs Omobola Johnson Olubusola is doing so much to boost ICT penetration in the country and creating the enabling environment for Foreign Direct Investment (FDI) in the sector.

❖ It is globally accepted that the development of any Nation is largely dependent on its Information Technology, what specific IT projects has your office deployed to enhance the development of Nigeria to meet up with global challenges?

Answer: You see of all the earth vast resources, none is more valuable than the human mind, the greatest gift from God because it allows us to innovate. This Government believes in giving local ideas global context with a simple message: Nigeria can and must be better, thus the word "Transformation." The vision is one of national renewal, a country with drive, purpose and energy where merit comes before privilege; run for the many not the few, strong and sure of itself at home and abroad. A country that does not shuffle further into the future afraid of it, but strides into it with confidence, sustainable economic growth, good governance, united and We want to renew our country's faith in the ability of the strong. government to deliver this new Nigeria faithfully, transparently, efficiently and fully committed. To do all these, we have embraced technology and IT projects to improve our processes to deliver and serve Nigerians faster, better and more efficient. It is not only in my office, the entire government is working to serve and protect Nigerians; while giving equal job-opportunity for all irrespective of social class, political affiliation, religious beliefs or tribe.

And I quite agree with you that development of any Nation today is largely dependent on its Information Technology. ICT is the convergence of communications, computing and information technologies and has become the catalyst that enhances development process of a nation. And despite the recent security, credit crisis and global economy challenges, which have led to record unemployment and economic hardship in both developed and emerging countries, there is no doubt that information and communications technologies (ICT) can play a vital role in the pathway to an economic recovery. A digital revolution can form the foundation of a sustainable global economy.

❖ Recently, the issue of standards has been at the front burner in the industry with NITDA naturally, championing the cause. Give us a brief overview of IT standards as they are and what needs to be done to accelerate meeting the set goals of global competitiveness?

Answer: You see I know the pedigree of Prof. Cleopas Angaye, the Director General of NITDA since when I was living in Canada, and had the opportunity to personally meet him when the present Vice President Arc Mohammed Namadi Sambo was the Governor of Kaduna State and I was his Special Adviser on ICT. It was at one of his program Nigeria ICT4D, where he talked about Government information security, his urban and rural ICT development programs and how to utilize IT opportunities to

restructure relations while improving better service to the general public and improve trade and commerce through ICT. Prof. Angaye has always been further ahead in terms of trying to set standards and ICT penetration in Nigeria so it is obvious NITDA naturally leads front burner in championing the cause.

The world economy today and indeed tomorrow will continue to be more information-based. Increasingly, astute decision making is crucial to competitiveness and success in business. For these reasons, the systems used to access and distribute information, and the technologies that drive them, are at the focus of both commercial and regulatory concerns. In addition, new ICT applications, such as mobile communications, pay-as-you-view video, personal computers, system networks and infrastructure will continue to radically change the way individuals work and enjoy their leisure time. We all use at least one of these technologies on a daily basis. These applications, however, will not reach their full potential unless both they and their supporting infrastructures are fully interoperable. This is the role of standards. Adopting international standard will give competitive advantage and boost growth, easy collaboration or sharing and quality.

Standards are technical specifications that support the development of open and competitive markets for the benefit of both consumers and industry. The previously distinct telecommunications, mass media/entertainment and computer industries are converging, giving consumers and service providers more options, and leading to the creation of what has been called the "information super-highway". In addition, a

convergence of the many underlying technologies - fixed and mobile telephones, satellites, cable TV, terrestrial radio and TV, and the Internet - is taking place to form a global communications network. Within this network, different components are being upgraded at different times, in different places and in different ways. The result is a highly complex and organically changing environment, which makes standardization even more important.

The World celebrates World Standards Day every year on 14 October, the date on which the United Nations (UN) established the International Organisation for Standardisation (ISO) in 1946 in collaboration with its electrotechnical and telecommunication counterparts IEC and ITU.

Let me give you an example. You are aware that many different aspects of human physiology, chemistry or behavior can be used for biometric authentication. For instance finger prints, ear, face and video-based Automatic System for Iris Recognition; even walk and other physiological behavioral characteristics. Now after Sept 11, the International Community jointly with the US Homeland Security created the Biometric National Institute of Standards and Technology (NIST), which adopted interoperable use of identity credentials called Personal Identity Verification (PIV) standard for Federal Employees. The standard adopted annotated multimodal measurement algorithms outlining procedures and formats for facial images and other bio-data and integrating all components of the database. The standard solution gives: Universality, Uniqueness, Permanence, Measurability, Acceptability, scalability, dependability and

fully customizable and secured including Electronic Fingerprint Transmission Specification bringing high performance universal interoperability suitable for the FBI background check.

❖ Still in pursuance of its mandate, NITDA recently inaugurated a National Technical committee for Information Technology Standards to review expired operating accreditation guidelines issued by the Federal Government. This NITDA initiative is aimed at giving impetus to "BUY MADE IN NIGERIA" IT products. How does your office provide the needed support to NITDA in carrying out this function?

Answer: Like I said before, Prof. Cleopas Angaye is still one step ahead and we all should adopt the "buy made in Nigeria" products because it support our indigenous producers and manufacturers and of-course help our economy to develop and compete globally. I have a Zinox laptop, and my wife has one too. I truly believe we have talented men and women Nigerians that given the opportunity and the support through patronage; they can compete with the world through innovation and creativity. We on our part will continue to support NITDA and all other Agencies and of-course the private sector to rally support and incentive for a sustainable economic development. Here I must congratulate Prof. Cleopas Angaye for the inauguration of the National Technical committee for Information Technology Standards, thereby joining the international community of Standards.

The sky's the limit on standards. The vehicles on Europe's roads conform to various standards, including safety, environmental and performance standards. These standards not only enhance confidence in the safety and road-worthiness of vehicles, but they also boost innovation and create a single European market for automobiles.

The European standardisation organisations are currently working to develop a standard common charger for electric vehicles. Moreover, the path to standardisation in the transport sector does not end down on the ground – it also covers the sky above. Standards play a critical role in the EU's massive aviation sector, which transports nearly 800 million passengers a year. Efforts are currently under way to harmonise standards for aviation equipment and air traffic management to ensure that the EU really does possess a single European sky. Nigeria must inculcate the spirit of Standardization in all aspect of our activities not only on ICT.

❖ Part of the committee's recommendation reads ".....after the issuance of the new guidelines, it will be regarded as economic sabotage if MDAs do not patronize Nigerian I.T products". The document further prescribes penalties for breach of this law by jail or fine. Sir, how would your office as the SSA on I.T to the Vice President collaborate with NITDA to ensure compliance?

Answer: Of-course through sensitization, education and information. It is only we that can develop our country and our ICT sector and nobody else. The sooner we realize that the faster we will begin to change our attitude

towards everything: towards one another, towards out leaders, towards out neighbours, towards our environment, our work ethics, behavior etc. My office is fully committed to collaborating with NITDA toward this goal and ofcourse with the National Orientation Agency (NOA).

It is really an economic sabotage if we as Nigerians fail to patronize made-in-Nigeria goods or services. Nigerian IT industry is in the same situation India was 15 years ago, which means our ICT sector is at the cross roads. The direction we choose will determine not just our future but also the legacy we leave behind for future generations of knowledge workers in this country, who have the creativity to dream impossible dreams and the determination to translate those dreams into reality. If they can translate these dreams into reality, we owe to ourselves the responsibility to patronize them so that they can employ our brothers and sisters.

Today's leadership has chosen the right direction. President Goodluck Jonathan believes Nigerians must possess the knowledge stock and the type of technological capability that can kick start and sustain an industrial revolution in the style of China, India and the East Asian newly industrializing countries — unleash the God giving potential of every Nigerian. The ability of our diversity to build strength and unity is the power that will propel the organization and consequently, the Nigerian industry, into new dimensions of performance. And ICT-enabled solutions in healthcare, education, agriculture, financial services and public services can drive socio-economic inclusion of more than 30 million citizens each year, faster, cheaper and more effectively than traditional models.

❖ The Cashless Economy summit organised by the Central Bank of Nigeria in partnership with New Horizons and NITDA is a function of the platform also provided by the Agency. The office of the Vice President is expected to participate actively in pursuance of the Federal Government's commitment to the cashless initiative. Can you shed some light on strategic areas you intend to lend support to the summit in particular and the cashless initiative in general?

Answer: The Nigerian economy is too heavily cash-oriented in transactions of goods and services. This is not in line with the global trend, considering Nigeria's ambition to be amongst the top 20 economies of the world by the year 2020. It is estimated that about 65 per cent of the cash in circulation in the Nigerian economy is outside of the banking system, thus severely limiting the impact of the CBN's efforts at price and economic stabilisation. Therefore, in order the address the issue, the Central Bank Governor of Nigeria Sanusi Lamido Sanusi is pursuing the cashless economy through his Banking Reforms. Obviously, the cashless economy will drastically reduce the spate of armed robbery and the loss of huge amounts of money and will discourage money laundering. Like I said, It is in line with Best Practices and of-course the use of Technology is paramount in the entire process.

I am aware that the Apex Bank in conjunction with New Horizons and other key stakeholder would be conducting targeted, interactive stakeholders forum to enlighten the public on the new cash policy with pilot schemes to commence in Lagos, Port-Harcourt, Aba, Kano and Abuja. I want to assure you that we will support the sessions through participation and advice whenever needed.

❖ In taking a general overview of the IT industry, how far would you say NITDA has achieved its mandate especially in the last five (5) years following the passage of the Act establishing the Agency?

Answer: The National Information Technology Development Agency Act of 2007 empowers the Agency, currently under the leadership of Prof. Cleopas Angaye to regulate, monitor, evaluate, and verify progress on an ongoing basis under the supervision and coordination of the Federal Ministry of Communication Technology. NITDA is the clearing house for IT projects in the public sector in Nigeria. The Agency is systematically achieving its mandate through its commitment to the drive to bring government and its services closer to the people through IT. Entrusted with the implementation of the National IT policy, NITDA is achieving its mandate by seeking to make Nigeria an IT capable country in its quest to achieve the MDGs and towards achieving our vision 20:2020

I would like to add here by saying that there is the new paradigm shift of President Goodluck Jonathan to transform Nigerian economy into a knowledge-based economy, and make Nigeria the pre-eminent innovation and off-shoring hub in African. The entire machinery of Government is mobilized toward job creation, support for the private sector to create more jobs and attract direct foreign investment into the country. As you all know

the Internet landscape is changing dramatically and it is very important for both public and private sector to work together to foster legitimate economic opportunity for Nigerians. The success recorded in the mobile telephony is the tip of the ice bag if full-blown broadband services become available all over the country.

There is obviously the direct correlation between the use of ICT and positive macroeconomic growth as encapsulated in the Key pillars of the ICT ecosystem. The ICT ecosystem is a complex and interdependent series of technical, social and business relationships. The system functions when multiple underlying factors align to reinforce one another.

- Infrastructure investment: The need for sustained investment in the ICT infrastructure is vital for the health of the overall ecosystem.
 While the bulk of the investment will have to come from private capital, public funding can play a supplementary role when the economics do not allow for private investment in rural regions.
- 2. Applications and content: IP networks are best utilized when the ICT sector consists of fluid structures with clusters of localized content and applications and has access to global content and applications. Despite the economic downturn, broadband connections are essential for citizen's personal and professional lives. Many individuals particularly value access to lawful content and services related to government, education, healthcare or sources of income.
- Markets and competition: Monopoly environments are typically less innovative with lower levels of investment than markets with robust competition. Best-practice countries promote diversity in platform

- technologies and services that promote widespread usage, and ensure affordability.
- 4. Policies and regulations: Regulations should be stable and predictable, and promote competition and investment. Excessive regulation can have the unintended effect of discouraging innovation around the development and deployment of next-generation networks and applications. Particular areas for innovative policy frameworks include the areas of security, privacy and quality of service.
- 5. Government budgets: Strategic use of the government procurement can accelerate the commercial viability of ICT services, promote entrepreneurship in the sector and create an opportunity for promising business models, particularly those embracing the principle of open trade-to flourish. Additionally, governments should focus on ensuring renewed research and development amongst private industry and academia.
- 6. Skills and education for IT: Best-practice countries have a solid base of ICT technical skills and a good level of broader science and math education. Interventions to improve ICT-relevant skills include focused training, certification and pipelines to university graduates in engineering and IT fields.

Finally, according to World Economic Forum, raising broadband penetration in emerging markets to levels currently in Western Europe could add \$300 to \$420 billion in GDP and create 10 to 14 million new jobs. We can and we must work together and support our leadership to move us from poverty to massive wealth creation

Thank You.