ABSTRACT
Experience has shown there are more than enough data with little or no information available. Nigeria being a country endowed with a lot of resources and whose people is about 170,123,740 million[6] needs a way of getting its populace with the necessary information they need. This can only be achieved through connecting people to all their information needs. Despite the huge investment and advancement in ICT, a lot of data has been generated but can be stored, processed and disseminated. With ICT, Nigeria will evolve to the next level of mass connectivity which is the digital nervous system. In this ICT is used to connect all information to the users. This looks at having a repository of information which is disseminated to people through electronic village halls with trained social workers, gsm operators who broadcast certain information to all citizens. The people’s responses are sent to digital nervous system through the social workers.

Keywords: Digital Nervous System, ICT, Mass connectivity

1. INTRODUCTION
Vast quantities of information exist in almost every sector in this country, Nigeria but are scattered about in different locations and in different formats for use by different groups of people for different purposes. This format has hindered the citizens especially the rural dwellers from getting the valuable information to lift them up from the cages where they find themselves. These rural dwellers have no confidence in themselves. There is no way of interacting with those outside their group thereby increasing the digital divide. Their potentials can not be identified because there is no information about them. There is need to have a reform and also to make a more efficient use of the country’s valuable information.

2. RELATED LITERATURE.
In Nigeria we have more than enough data but despite this no information is available for the masses that need them. This is because the huge amount of data generated are not properly stored, processed and disseminated despite the huge advancement in ICT. It is strongly believed that with ICT, the Nigerian populace especially the rural dwellers will evolve to the next level of information age which is the digital nervous system.

The question then arises, what is digital nervous system. Steve Ballmer in his attempt to explain it likened it to human nervous system which allows us to hear, see and take input. This also allows us to think, plan and make decisions and communicate and take action[3]. In this, just like the biological nervous system we have the information we need. We are always alert to the most important and block out information that are not important ie information that are valuable getting to people who need to know about them[4]. In another work it is described as being synonymous with the term zero latency enterprise ie the way an enterprise use IT system to rapidly communicate between customers, employers and trading partners[5].

Gates in his book ‘Business @ The Speed Of Thought’ defined Digital nervous system as “Futuristic vision of a computer network that imitates the biological nervous system in (1) sifting what bit of incoming information is important from what is not, (2) learning from experience, (3) adapting to changes in its external environment, and (4) reacting swiftly to advantageous or threatening situations in addition to managing the internal environment of an organization. Gates further used Digital nervous system to describe a vision for how the IT infrastructure of an enterprise could be analogous to the autonomic nervous system of a biological organism[1].
The nature of digital nervous system was illustrated by Merrill Lynch which was brought on line in 1998 in which their financial consultants (FC) can automatically display what ever real-time data in which they call upon to monitor on regular basis. The FC’s were given several views of the relevant data and they can at a glance vary key decision variables.

The same unsatisfactory conditions which existed at Merrill Lynch in 1997 exist almost every where in Nigeria today and this can be corrected in a similar way. Vast quantities of information exist in the bowels of every state ministries already in electronic forms but are scattered in different locations for use by different local government areas by different people for different purposes. The data typically reside in state ministries-education, health, etc. There is therefore need to construct a digital nervous system capable of accessing all such data from a single point and extracting from it the needed information for the Nigerian populace.

3. DESIGN METHODOLOGY

In designing this, there will be a central module where all the other modules are attached which is the repository of information from where information is retrieved and response sent back to the central module. This can be shown using fig 1. In fig 1 there are six modules connected to the central module and they include the following:

1. Talent Hunt
2. Health Education
3. Poverty Reduction Initiatives
4. Fighting Pandemics
5. Empowerment Initiatives
6. Political Enlightenment
7. Political Enlightenment

Talent Hunt: This is “Getting the People You Need, When You Need them”. One of the biggest challenge of any chief executive is always finding and keeping good people. Many people are talented but are disadvantaged to the extent that they never put their talent to use. With this connectivity there could be a continuous search for talented but disadvantaged people who could be helped to develop their respective talents to the advantage of themselves, their families, their LGA’s, states and the country as a whole. This module deals with every information about ministries that require people with the kind of qualifications needed for that particular position.

The data from this module is sent to the central module from where the information needed is sent to the populace through their village halls by their intermediaries such as social workers who have direct access to the central module. The poliferation of the use of GSM phones even in the hinter lands makes the concept easily achievable. Any feedback from the citizenery is also sent back to the source.

Health Education: This module contains data about health. Health education is educating people about health[8] which contains many areas and they include environmental health, physical health, social health, emotional health, intellectual health, and spiritual health.[9] It can be defined as the principle by which individuals and groups of people learn to behave in a manner conducive to the promotion, maintenance, or restoration of health. Since we can define Health in many ways, so also we can define health education in many ways. This has led The Joint Committee on Health Education and Promotion Terminology of 2001 to define Health Education as “any combination of planned learning experiences based on sound theories that provide individuals, groups, and communities the opportunity to acquire information and the skills needed to make quality health decisions.”[10]

The World Health Organization defined Health Education as “comprising of consciously constructed opportunities for learning involving some form of communication designed to improve health literacy, including improving knowledge, and developing life skills which are conducive to individual and community health.”[11] The purpose of this module is to positively influence the health behavior of individuals and communities as well as the living and working conditions that influence their health. The information got from this module will help in improving the health status of individuals, families, communities, states, and the nation. It will also enhance the quality of life for all people, reduce premature deaths.

The costs (both financial and human) that individuals, employers, families, insurance companies, medical facilities, communities, the state and the nation would spend on medical treatment can be reduce when data in this module focuses on prevention. This can only be achieved by the use of IT by connecting people with the required information. The data from this module is connected to the central module which is the repository of all information. IT will help the health workers reduce the amount of paper work done, and improve their data accuracy. It will also empower these health workers to provide timely care and information. These health workers will educate people on family welfare etc.
Poverty Reduction Initiatives: This module also contains all sorts of data concerning poverty reduction initiatives. This includes the summary of suggestions which several Government and non-Government have given poverty reduction initiatives. In Nigeria a lot of poverty reduction initiatives have been used. Some examples are People’s Bank of Nigeria (PBN), Family support Programme (FSP), Poverty Alleviation Programme (PAP), Better life Programme (BLP) etc.[14]. These initiatives failed because the constant needed pieces of information were not available and where available were not accessible by the people who needed them. For any of these initiatives to achieve its objective, there must be a flow of information needed to sustain the programme from the government and NGO’s to the people, infact vice versa.
With this digital connectivity the information can be online and displayed in the Electronic village halls thereby making such information accessible to the rural dwellers. These information will be better understood if there is an intermediary to explain in greater details what is required of them. This can only be achieved with trained social workers. Also GSM operators can broadcast certain information to all, and the citizens responses are directed to the DNS or via the social workers.

**Fighting Pandemics:** This module contains data concerning different types of diseases their symptoms, and the medications needed for each. This can be achieved through telecentres, telephones, radio, televisions and the internet. The poor can be informed about diseases like HIV/AIDS, Bird flu; Influenza, Cholera and this will help them come out of poverty since poverty is not only lack of money but lack of the necessary information. This can be achieved through the radio and internet. In Sri Lanka radio is used as an interface between rural poor and the internet. In this a panel of resource persons browse the internet in response to listeners request and this is relayed to the poor through a radio program on a daily basis[15].

**Political Enlightenment:** In this module different mass enlightenment campaigns are listed. This will give the people every information about the politics of the country. The masses have the opportunity of knowing who wants to govern them and those to cast their votes for. This will expand the economy, will make politics more diverse and by default more corrupt. This when it happens and people are impacted with a lot of ideas they will start discussing new ideas for society. The populace begin to finally think outside the box they had been enclosed in for so long and they now develop new opinions on everything in society and government. The "Age of Enlightenment" became much expanded not only knowledge but to greater movement of greater capital (money) and ideas. These were part of the contributing factors to the rise of the middle class and a decline in the power of the aristocrats. With this people began to question a lot of things. It's kind of a "feedback loop", where more knowledge leads to more change which in turn leads to more knowledge, etc. The Enlightenment, or Age of Enlightenment, rearranged politics and government in earthshaking ways.

**Empowerment Initiatives:** The module contains IT-based empowerment initiatives which includes on-line jobs one can do in virtual offices. This also involves the provision of IT equipment or tools to enhance the flow of information in a sustainable way. The tools include village pay phones which can empower the poor by creating jobs, improving access to health care, education and other services[12]. This village pay phones provide a means of communication and income generation. Also another tool is Telecentres which provide access to information on community level. Many of these telecentres combine radio, phone, fax, email and internet facilities in rural communities. The telecentres provide information on things like agriculture, health education and livelihood. In [13] the author gives example of how telecentres can be a strong health information disseminating tool and how the youth have improved access to information through community based telecentres in Zambia.

The Central Module: This module is the repository of information. Any information from the other modules are sent to the people through Electronic Village Halls with trained social workers, GSM operators to broadcast certain information to all. The feedback from the citizens are sent directly to the DNS or through the social workers.
4. CONCLUSION.

Despite the huge investment and advancement in ICT, a lot of data has been generated but can be stored, processed and disseminated. With ICT, Nigerian populace especially the rural dwellers will evolve to the next level of mass connectivity which is the digital nervous system. In this ICT is used to connect all information to the users. In Nigeria we have more than enough data but despite this no information is available for the masses that need them. This is because the huge amount of data generated are not properly stored, processed and disseminated despite the huge advancement in ICT. In this DNS information which people are not aware of are brought to them.

This information can be packaged for them because they have ICT to help them. This is achieved through equipping their villages/communities with televisions. When there is proper mass connectivity the society is majorly information driven. Rapid cross pollination of ideas becomes possible. This would lead to spontaneous creation of new business ideas and markets which benefit many of the citizens. Also the wide spread of GSM phones and the internet opens the door for a wide range of people to subscribe to and access information of interest to them.

With the use of GSM, Electronic village halls and Internet connectivity a lot of things can be achieved namely:

a. There will be opportunity creation for the citizens
b. There will be identification and development of potentials for the citizens.
c. The people’s mind set will be transformed to one of positive values, self confidence, honesty and integrity.
d. This will create powerful ICT based communities to facilitate mutual beneficial interaction both among groups within nations and across large geographical divides.
e. Use of GSM and internet to dynamically receive a wealth of new business ideas from the populace to enable the same information to be ready to those they can benefit.
f. There will be business and engineering skills training

g. The quality of life in rural Nigeria will be enhanced through the effective use of the mass connectivity thereby bridging the digital divide. Also when this connectivity is properly harnessed, democracy dividends will be taken to the hinter lands.
h. A new employment opportunities that enhances income levels will be created when there is a well articulated pursuit of professional development, business development, high technology apprenticeship and the repacking of the individual in a way that enhances self worth.

This DNS gives room for people to send their feedback through the social workers who have direct access to the database. The GSM operators also broadcast the necessary information to the populace. In this way nation will be connected and every information that comes from the different modules will be sent to the populace. This in effect will bridge the digital divide thereby empowering the rural poor in Nigeria. With this Nigeria will grow into a better nation with its citizens being aware of what is happening ie having the necessary information they need.
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