

*Full Length Research Paper*

# E-governance: An imperative for sustainable grass root development in Nigeria

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**This paper aims to put forward the importance of e-governance in achieving sustainable grassroots development in Nigeria. The emergence of information communication technology has provided opportunity for borderlessness, interconnectedness and de-territorialization of government policies and programmes within the global village. Information communication technology is a necessary political tool set out to reconcile traditional barrier of distance in the management of public affairs. Today, E-governance has being implemented in Europe and other westernized countries for sustainable development through the application and adoption of Open Access Information Communication Technology (OAICT) designed to enhance social service delivery at the grassroots level. This paper adopts secondary sources of data. It argues that e-governance promotes participatory, transparent, responsive and inclusive democracy to enhance grassroots development. The accessibility of local citizens to their elected representatives and basic social services through the provision of information communication technology enhances effective communication between the government and the governed at the grassroots level, while it creates open plain ground for the citizens to receive feedbacks from the appropriate local government channel. This study concludes that e-governance ensures effective and efficient service delivery and enhancing citizen's participation in local affairs. It therefore recommends that federal government should make policy that will facilitate and fast-track the adoption of ICT and training of local government personnel in the art of e-governance through which sustainable grassroots development could be accomplished in Nigeria.**

**Key words:** E-governance, e-government, information communication technology, grassroot development, local government, democracy, Nigeria.

## INTRODUCTION

The emergence of information communication technology has provided opportunity for borderlessness, interconnectedness and de-territorialization of government policies and programmes within the global village. The discovery of information communication technology has made the activities of government more accessible to the

governed while the traditional barrier of distance becomes surmountable through the modern approach of communication. Application of e-governance has been a potent instrument in disseminating information, consultation, enhancing citizen's participation, sending feedback to the citizens, monitoring and evaluating government projects

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and making government accountable and transparent in its total political engagements. E-governance has become a necessary political mechanism in evaluating government performance in many developed nations of the world, including United Kingdom, U.S.A, Netherland, Germany etc; it enhances citizen's ability to have access to the basic programmes of government while it brings about openness in performing public functions. The scope of e-governance revolves around e-registration, e-participation, e-taxation, e-mobilization, e-education, e-service delivery, e-feedback, e-policing, e-planning, e-debate and analyses of public financial statements. It also creates awareness for the general local populace in relation to activities such as immunization, vaccination, civic education, time for collection of waste, identification of community development association in every neighborhood and making suggestions for the betterment of government programmes. A few developing nations have also set off to adopt e-governance for the public functions, for instance, India has commenced pilot project on e-governance to facilitate citizen's participation and enhance social service delivery. According to Norris (2000) Cyber-optimists are hopeful that the development of interactive services, new channels of communication, and efficiency gains from digital technologies will contribute towards revitalizing the role of government executives in representative democracies, facilitating communications between citizen and the state.

Governments throughout the world are in quest of finding ways to deliver public services more efficiently and effectively. Incorporation of electronic governance (e-governance) in the local governments tier is an option often discussed, although the expectations often differ. For example, some expect service delivery costs to be reduced, many hopes for equitable provision of public services and others anticipate better planning across a metropolitan area. Various social and political motivations may also be reasons for the change as well. Despite the immense popularity and potency of electronic government, it remains uncharted in many countries regarding proper implementation at the local government level. However, technology possesses the prospect of improvement in the way government works, and makes better interactions with their citizens. National governments are trying to realize this potential by finding ways to implement novel technology in spearheading its utilization to achieve the best services for their citizens. They range from awareness raising campaign, knowledge acquisition, social networking to strategic planning, development, and implementation (Rahman, 2011). According to Siar (2005) the application of information and communication technology for improving governance by enhancing government's role in service delivery, public administration, and promotion of participatory democracy has been gaining momentum in many parts of the world. Maswood (2009) opines that E-governance may be understood as the performance of governance through

the electronic medium in order to facilitate an efficient, speedy and transparent process of disseminating information to the public, and other agencies, and for performing government administration activities. It is the use of modern Information and Communication Technologies, such as Internet, Local Area Networks, Mobiles etc, by Governments to improve effectiveness, efficiency and service delivery to promote easy access to the Government services to the public. E-Governance is a network of organizations to include government, nonprofit, and private-sector entities; in e-governance there are no distinct boundaries.

The purpose of implementing e-governance is to enhance good governance. Good governance is generally characterized by participation, transparency and accountability. The recent advances in communication technologies and the Internet provide opportunities to transform the relationship between governments and citizens in a new way, thus contributing to the achievement of good governance goals. The use of information technology can increase the broad involvement of citizens in the process of governance at all levels by providing the possibility of on-line discussion groups and by enhancing the rapid development and effectiveness of pressure groups. Advantages for the government involve that the government may provide better service in terms of time, making governance more efficient and more effective. In addition, the transaction costs can be lowered and government services become more accessible (UNESCO 2005). According to Danfulani (2013) E-governance came as a result of revolution in Information and Communication Technology (ICT) which finds expression in digital technologies like personal Computers, the internet, mobile telephony, and different electronic applications. A confluence of these technologies eased the flow of information, its accessibility and delivery. This came with numerous advantages because citizens were connected with government, government became more efficient and robust, cost of governance and transaction were scaled down, and transparency was enhanced. Akbar (2004) corroborates that e-Governance is improving the lives of billions of people worldwide and is integrating government services in a way never seen before.

Today, the leading e-governance issues for state and local officials are more complex and more deeply embedded in social and organizational context than ever before. Networks continue to connect vast amounts of data from an increasing number of sources, with impacts on the social, political, and economic geographies of governance. Security has taken on renewed importance associated with increasing dependence on massive data bases and networks and the related need to protect individuals, organizations, systems, and infrastructure from fraud, errors, hackers, and attacks. At the same time, concern for service delivery, effective management, IT investments, and public access all continue to receive leadership attention (Dawes, 2008).

Information Communications Technologies has been described as the tools for changing the world values and making our society a knowledge base environment where everything is done electronically. The Information Society is creating unprecedented conditions for bridging the digital divide through supporting government operations to strengthen the establishment of efficient, effective and transparent governance systems. Electronic tools can significantly improve the services and information flows from administrations to their constituencies. Communication among administrations and citizens and businesses can be enhanced as ICTs offer unique opportunities for the re-use and exploitation of public sector information within the emerging digital economy which in turn create vast economic opportunities for the country at large (Hassan and Willie, 2010). The revolutionary power of Information Communication Technology (ICT) has therefore redirected the way people do things, most especially government business. Governments, all over the world are adopting ICT tools to achieve the goals of increased effectiveness, transparency and accountability to their people. The use of these tools in governance is what is called Electronic Governance or e-Governance (Awolaye et al., 2008).

E-Governance has consequently become an accepted methodology involving the use of Information Technology in improving transparency, providing information speedily to all citizens, improving administration efficiency and improving public services such as transportation, power, health, water, security and municipal services (Radhakrishnan, 2006). Local government institution is the closest governmental unit closest to the citizens in the world over; it is assigned to perform fundamental functions capable of ensuring grassroots development by providing social services and promoting citizens participation in local decision making. Thus, application of information communication technology at local level will facilitate efficiency and effectiveness in achieving the stated objectives at the local level. Hence, E-governance therefore becomes a political device adopted to ensure good governance at the grassroot level through which government and citizen's relationships are facilitated to ensure better performance. It brings about openness and transparency in the running of governmental business. It is against this backdrop that this study examines e-governance as a fundamental political strategy through which the realization of sustainable grassroots development could be attained in Nigeria.

## CONCEPTUAL FRAMEWORK

Governance is the act of governing. It is not a new concept and it is as old as the human civilization. In a country domain, the governing of its decision making processes and related systems are typically administered by the government. In one of its strategy papers, the World Bank

defines governance as "the way the power is exercised through a country's economic, political, and social institutions." The UNDP explanation states that, it is the exercise of economic, political, and administrative authority to manage a country's affairs at all levels. It comprises mechanisms, processes, and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations, and mediate their differences (Daily news, August 2, 2013). The concept of e-governance may be referred to application of information communication technology by the government to enhance accountability, creating awareness and ensures transparency in the management of governmental business. It is a political strategy through which the activities of government are made known through the adoption of modern communication. In similar direction, Backus (2001) opines that e-governance is defined as the application of electronic means in the interaction between government and citizens and government and businesses, as well as in internal government operations to simplify and improve democratic, government and business aspects of Governance. The term interaction stands for the delivery of government products and services, exchange of information, communication, transactions and system integration. Dawes (2008) furthers that E-governance comprises the use of information and communication technologies (ICTs) to support public services, government administration, democratic processes, and relationships among citizens, civil society, the private sector, and the state.

By implementing e-governance systems, we can provide the possibility of closer interactions, government to government, government to public services, government to citizens, and public services to citizens. Electronic Governance (e-Governance) is the use of Information and Communication Technologies (ICT) for the planning, implementation, and monitoring of government programmes, projects, and activities (Crowley, 2008). E-Governance is expected to help deliver cost-effective and easy-to-access citizen services. It is defined as delivery of government services and information to the public using electronic channels (Baidyabati Municipality, 2012). E-governance means using information and communication technologies (ICTs) at various levels of the government and the public sector and beyond, for the purpose of enhancing governance (Bedi et al., 2001; Holmes, 2001; Okot-Uma, 2000 cited in Palvia and Sharma, 2007). E-governance is a set of "technology-mediated processes" that are changing both the delivery of public services and the broader interactions between the citizens and Government. E-governance is generally considered as a wider concept than e-government, since it can bring about a change in the way how citizens relate to governments and to each other (Maswood, 2000). In the view of Akbar (2004), E-governance is the computerization and automation of common government processes with the goal of lowering costs, improving efficiency and

generally providing better services to citizens.

Governance refers to the exercise of political, economic and administrative authority in the management of a country's affairs, including citizens' articulation of their interests and exercise of their legal rights and obligations. E-governance may be understood as the performance of this governance via the electronic medium in order to facilitate an efficient, speedy and transparent process of disseminating information to the public, and other agencies, and for performing government administration activities. E-governance is generally considered as a wider concept than e-government, since it can bring about a change in the way how citizens relate to governments and to each other. E-governance can bring forth new concepts of citizenship, both in terms of citizen needs and responsibilities. Its objective is to engage, enable and empower the citizen (UNESCO 2005). It stands for electronic-governance and the word "electronic" denotes the use of technology in the system of governance. If it is made more explanatory, e-Governance is the application of Information and Communication Technology (ICT) for assisting the government for efficient and meaningful delivery of government services (Daily news, August 2, 2013).

E-Governance is the delivery of government services and information to the public using electronic means (usually Information Technology). It is seen as the best way for the implementation of e-governance because it is efficient, speedy, participatory, transparent, and affords accountability when disseminating information to the public while at the same time performing Government activities (Government Information Agency, Guyana). E-Governance usually falls under three sections:

**E-administration**, which is aimed at improving government processes especially in the public Sector

**E-services**, aimed at improving the delivery of public services, for example, providing public documents online (such as birth certificates, etc.)

**E-Democracy** which is aimed at involving greater participation by the public in the decision making process of a country (Government Information Agency, Guyana).

E-Governance is a wider concept that defines and assesses the impacts technologies are having on the practice and administration of governments and the relationships between public servants and the wider society, such as dealings with the elected bodies or outside groups such as not for profits organizations, NGO's or private sector corporate entities. E-Governance encompasses a series of necessary steps for government agencies to develop and administer to ensure successful implementation of e-government services to the public at large (theinformationdaily.com). E-governance can transform citizen service, provide access to information to empower citizens, enable their participation in government and enhance citizen's economic and social opportunities, so

that they can make better lives, for themselves and for the next generation ([www.saaritresources.com](http://www.saaritresources.com)). The features of E-Governance includes the ability for citizens to leave feedback to various government offices; a subscription based list serve or e-Newsletter that keeps citizens and other agencies informed; Online discussion forums or chat rooms to discuss policy issues; e-Meetings for cross agency/cross governmental participation; Online citizen surveys or polls for specific issues with published results; Online citizen satisfaction surveys with published results; Online decision-making - e-petitions, e-referenda; Online performance measures with published results (Crowley, 2008). Hence, The 'connected citizen' now has the option to communicate with the government to monitor its performance at local level and immediately respond to the effectiveness of their services, rather than wait for the electoral process to indicate its performance. Thus enhanced accountability and transparency that are keys to good governance are ensured through electronic interaction (Hina, 2007).

### Development defined

Defining the concept of development is not an easy task; this is due to divergence philosophical views of various scholars. Many have defined it along economic growth while some provide analytical orientation along the part of social well-being of a nation. However, despite these variations, development may be defined as positive transformation in social, political, economic and institutional structures of a nation. The above definition conceptualized development as all encompassing revolving around all aspects of life of a nation. Development is seen as a giant stride taken towards achieving the optimum welfarism of the people in a society; it accommodates psychological, social, emotional and intellectual well-being of the people, therefore, development is defined in relation to socio-economic transformation directed towards improving the lives of the general citizenry.

Development is a multi-dimensional process but gives a definition that is often considered as the other extreme of emphasis from that of Rodney. He describes development as a multi-dimensional process involving the reorganization and reorientation of the entire economic and social system. This involves in addition to improvement of income and output, radical changes in institutional, social and administrative structures as well as in popular attitudes, customs and belief (Todaro, 1982 cit in Ikeanyibe, 2009). Todaro's definition gives the meaning, which Todaro's definition gives the meaning, which the concept of development assumes whenever it is discussed in relation to countries. Development at this level of conceptualization is often understood in terms of economic development. This does not only signify economic development, but as Todaro notes above, it equally implies improving the social, administrative,

political as well as people's cultural attitudes and beliefs that are anti -progress (Ikeanyibe, 2009).

Furthermore, the classical definition put forward by the United Nations World Commission on Environment and Development in 1987, emphasizes that development is sustainable if it meets the needs of the present without compromising the ability of future generations to meet their own needs.

### **E-Government versus e-governance**

E-government focuses on constituencies and stakeholders outside the organization, whether it is the government or public sector at the city, county, state, national, or international levels. On the other hand, e-governance focuses on administration and management within an organization, whether it is public or private, large or small. E-governance concerns internally-focused utilization of information and internet technologies to manage organizational resources – capital, human, material, machines – and administer policies and procedures (both for the public sector or private sector). E-governance deals with the online activities of government employees. The activities might include information to calculate retirement benefits, access to important applications, and content and collaboration with other government employees anytime, anywhere (Palvia and Sharma, 2007). E-government is a generic term for web-based services from agencies of local, state and federal governments. In e-government, the government uses information technology and particularly the Internet to support government operations, engage citizens, and provide government services. The interaction may be in the form of obtaining information, filings, or making payments and a host of other activities via the World Wide Web (Sharma and Gupta, 2003, Sharma, 2004, 2006 cit in Palvia and Sharma, 2007). While e-government encompasses a wide range of activities, we can identify three distinct areas. These include government-to-government (G to G), government-to-citizens (G to C), and government to business (G to B). Each of these represents a different combination of motivating forces. However, some common goals include improving the efficiency, reliability, and quality of services for the respective groups. In many respects, the government to government (G to G) sector represents the backbone of e-government. It is felt that governments at the union, state and local level must enhance and update their own internal systems and procedures before electronic transactions with citizens and business are introduced. Government to government e-government involves sharing data and conducting electronic exchanges between various governmental agencies. Government to citizen (G to C) facilitates citizen interaction with government, which is primary goal of e-government. This attempts to make transactions, such as payment of taxes, renewing licenses and applying for certain benefits, less time consuming and easy to

carry out. Government to citizen initiatives also strives to enhance access to public information through the use of websites and kiosks (Monge, 2008). Citizens to Government (C2G) will mainly constitute the areas where the citizen interacts with the Government. It will include areas like election when citizens vote for the Government; Census where he provides information about himself to the Government; taxation where he is paying taxes to the Government (Sachdeva, 2004). In similar direction, E Governance provides a common framework and direction in the implementation of Government Policies in the following areas: Across the Public Sector Organizations and Institutions (G2G) between government and the Business community (G2B) between government and Citizens (G2C). A very interesting set of options emerges when considering the impact of e-Government reforms on business environment. New technologies applied to the transformation of government procedures among trade partners have the potential of lowering transaction costs between government and business. In turn, this can increase the competitiveness of local industries as well as attract foreign investment. It also provides a support to the business sector to effectively integrate into global markets (Maswood, 2009). One step toward a more evolved model of governance is linked to the new public management (NPM) model. The NPM postulates that the governmental entity is driven by a mission and operates strategically like a business unit, being conscious of cost efficiency. In this model, governance bureaucracies turn into strategic business units, competing with each other, and citizens become customers (Gabriela, 2012). Therefore, E-Government is suited for a well-informed, educated citizen and such a resource needs to be deployed across the urban and rural divide to reach out to the stakeholders through awareness. The legislative environment is embedded in the 'e' capsule which acts as a stimulant to provide better services in a secure and effective manner thereby cultivating trust. Online presence in the global world is inevitable to utilize the potential of emerging e-economy at both local and state level. Trust creation through reversible participation can work to build bridges by implementing ICT in an offline sphere for sustainable e-governance (Hina, 2007) (Table 1 and Figure 1).

### **E-Governance in the United States of America, UK, Singapore and Norway**

These are seen in Figures 2-5.

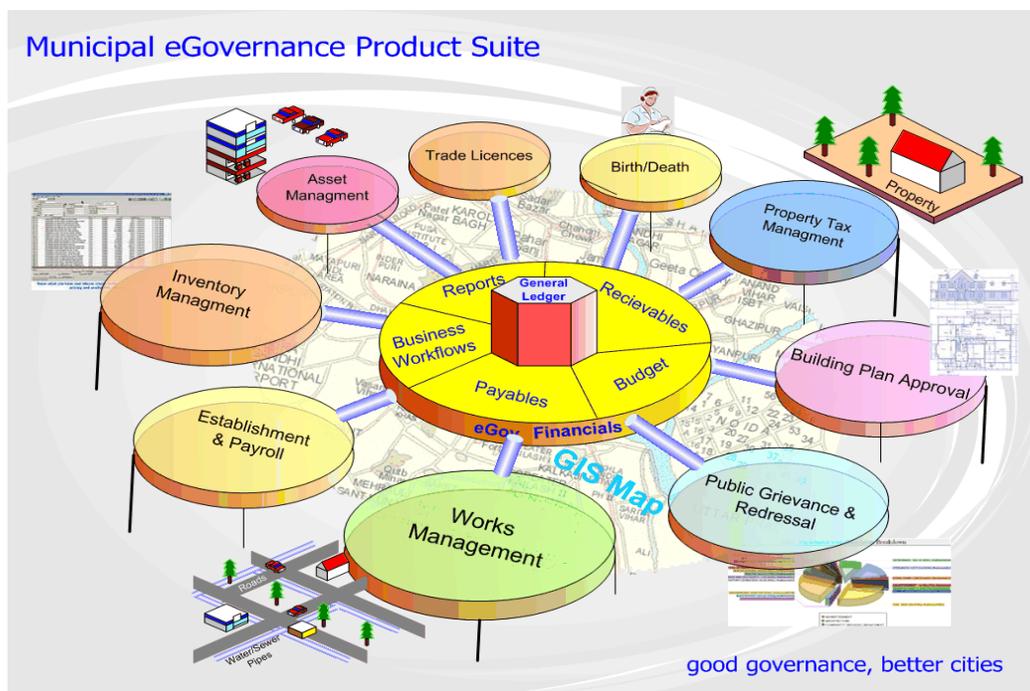
### **Necessity of e-governance for sustainable grassroots development in Nigeria**

Nowadays, local e-government management includes the extended use of information and communication technologies (ICTs) within government for purposes of improving

**Table 1.** E-government readiness index 2005: top 50 countries.

Rank	Country	Index	Rank	Country	Index
1	United States	0.9062	26	Slovenia	0.6762
2	Denmark	0.9058	29	Hungary	0.6536
3	Sweden	0.8983	28	Luxembourg	0.6513
4	United Kingdom	0.8777	29	Czech Republic	0.6396
5	Republic of Korea	0.8727	30	Portugal	0.6084
6	Australia	0.8679	31	Mexico	0.6061
7	Singapore	0.8503	32	Latvia	0.6050
8	Canada	0.8425	33	Brazil	0.5981
9	Finland	0.8231	34	Argentina	0.5971
10	Norway	0.8228	35	Greece	0.5921
11	Germany	0.8050	36	Slovakia	0.5887
12	Netherlands	0.8021	37	Cyprus	0.5872
13	New Zealand	0.7987	38	Poland	0.5872
14	Japan	0.7801	39	Spain	0.5847
15	Iceland	0.7794	40	Lithuania	0.5786
16	Austria	0.7602	41	Philippines	0.5721
17	Switzerland	0.7548	42	United Arab Emirates	0.5718
18	Belgium	0.7381	43	Malaysia	0.5706
19	Estonia	0.7347	44	Romania	0.5704
20	Ireland	0.7251	45	Bulgaria	0.5605
21	Malta	0.7012	46	Thailand	0.5518
22	Chile	0.6963	47	Croatia	0.5480
23	France	0.6925	48	Ukraine	0.5456
24	Israel	0.6903	49	Uruguay	0.5387
25	Italy	0.6794	50	Russia federation	0.5329

Source: The UN Global E-Government Readiness Report 2005 adapted from Palvia and Sharma (2007).



**Figure 1.** Municipal e-governance product suite. Source: Nadhamuni (2009).

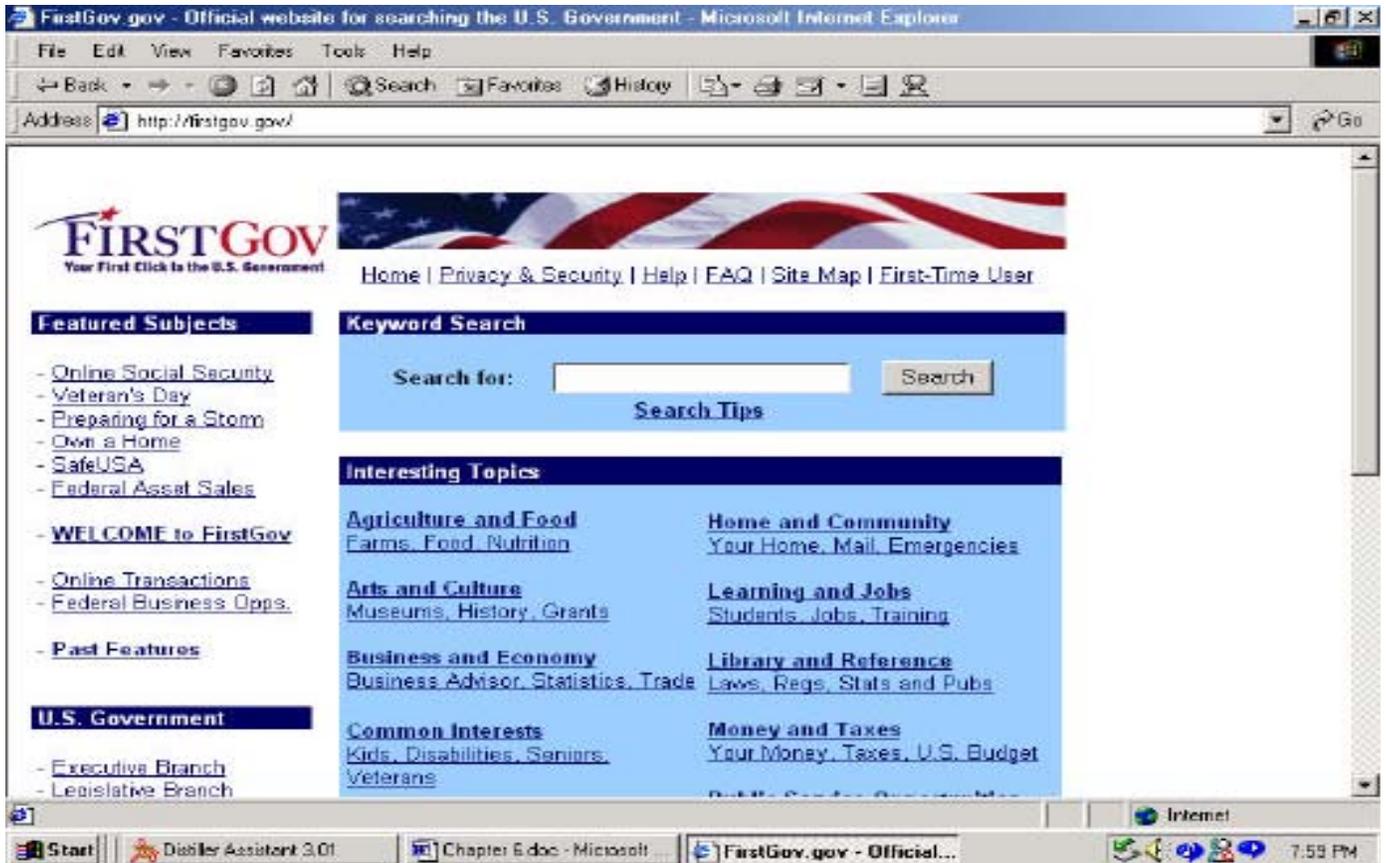


Figure 2. E-Governance in United States of America.



Figure 3. E-governance in UK. Source: Norris (2000).



Figure 4. E-governance in Singapore. Source: Norris (2000).



Figure 5. E-governance in Norway. Source: Norris (2000).

service delivery to citizens or to enhance back-office operations. The implementation of ICT for overall development and advancement of e-government strategies are likely to have a strong bias towards cities and local towns where most of the citizens reside. However, it has been observed that, at the national level and in the advantaged localities (central cities, capital cities, and urban areas) ICT's are extensively used to address only key business processes. The national e-government policy does not always apply in devotion to the local government level. Even they are being applied; the policy cannot avoid duplication of efforts, problems of interoperability, and inability to leverage economies of scale and security. The key components that drive the local governance and ICT's remain access, content, citizen service, and economic and social development, and for proper implementation of the ICT strategies, the need for these initiatives targeting marginalized areas has also remained not properly identified. Furthermore, in spite of the local governments differ considerably in terms of capacity, content, service delivery, and effectiveness; they have to be dynamic and developmental due to their involvement in local economic development. Local governments need to take the role of the key player in developing integrated rural-based, citizen-centric, information-driven, user-friendly, easily-accessible, and dynamic e-governance system (CPSI, 2005; Samarajiva and Zainudeen, 2008 cit in Rahman, 2011). The new opportunities afforded to local government by the rapid take up of social media mean councils should go beyond basic local e-government – where information and services are delivered through digital technology – to a more collaborative way of governing. This socio-technological shift requires councils to adopt a new form of governance that is based on online participation and the co-production of services with citizens and communities (Magele, 2012). Cramped spaces; shabby ambience; discourteous dealing personnel and their chronic absenteeism; demands of gratification; inefficiency in work; long queues; procrastinating officials; procedural complexities; etc., were some of the undesirable features of the working of the government departments. Consequently, a visit to government department by a citizen to make use of any service used to be a harrowing experience. With the rising awareness amongst the citizens and their better experiences with the private sector – the demand for better services on the part of government departments became more pronounced (Monga, 2008).

The recent development in information communication technology provides opportunities for bridging the gap between the government and the citizens. The lack of basic modern communication technology at the grassroots level has hampering the citizen's participation and good service delivery in Nigeria. Looking at the organizational structure of local government in Nigeria, it is discovered that they are not adequate equipped with modern technological development which has been

creating wider gap between the government and the governed at the grassroots level. In this context, there is need to advance information communication technology through which sustainable development could be achieved at the grassroots level in Nigeria. E-governance is capable of promoting participatory democracy at the grassroots level and providing riding board for citizen's involvement in governance, as it was upheld by Sachdeva (2002) that e-democracy is an effort to change the role of citizen from passive information giving to active citizen involvement. In an e-democracy the Government will be informing the citizen, representing the citizen, encouraging the citizen to vote, consulting the citizen and engaging the citizen in the Governance. Taking the citizens input about the various government policies by organizing an e-debate will further strengthen the e-democracy.

The roots of this government reinvention can be traced back to a number of historical causes (Heeks, 1999 cit in Siar, 2005). One of them is the challenge confronting governments to keep or win back citizens' trust and confidence in public institutions, which has waned through the years with increasing reports of corruption. Another is the influence of the neoliberal thinking that emphasizes the efficiency of markets and the notion that the inefficiency of the public sector may be corrected by making it as similar as possible to the private sector. Corollary to this is the intensified pace of competition brought about by globalization, which could also explain why so many governments pursued many reform strategies so aggressively at much the same time (Kettl, 2002 cit in Siar, 2005). The purpose of implementing e-governance is to enhance good governance. Good governance is generally characterized by participation, transparency and accountability. The recent advances in communication technologies and the Internet provide opportunities to transform the relationship between government and citizens in a new way, thus contributing to the achievement of good governance goals. The use of information technology can increase the broad involvement of citizens in the process of governance at all levels by providing the possibility of on-line discussion groups and by enhancing the rapid development and effectiveness of pressure groups. Advantages for the government involve that the government may provide better service in terms of time, making governance more efficient and more effective. In addition, the transaction costs can be lowered and government services become more accessible to the public at large. Ultimately, the overall goal of E Governance is to make the Government more result oriented, efficient and citizen centered. It enables the citizens and outside world to access Government services and information as efficiently possible through the use of Internet and other channels (Maswood, 2009).

Over the past two decades, rapidly evolving information and communication technologies (ICTs) have permeated nearly every aspect of government, business, and daily

life. Digital information has exploded in volume and diversity. It is created, shared, and used in myriad ways that can generate both public and private value. Communication networks span the globe, allowing individuals, groups, and organizations to interact regardless of time or location (Dawes, 2008). E-Governance helps simplify processes and makes access to government information easier. The other anticipated benefits of e-governance include efficiency in services, improvement in services delivery, standardization of services, better accessibility of services, and more transparency and accountability. It is convenient and cost-effective for the Government also in terms of data storage and access to the stored data. The government benefits from reduced duplication of work. In addition, the processes of data collection, analysis and audit are simplified, and become less tedious. Another cherished goal of e-governance is greater citizen participation in the governance of the country (Barman, 2009). While ICTs have the potential to create a platform for greater community awareness and participation in civic processes, e-governance initiatives tend to emerge under a model of service delivery (Nuggehalli, 2009), from an ICT for development perspective, all municipalities can adopt effective e-governance for social and local economic development (Abrahams and Newton-Reid, 2008). In this regard, e-governance facilitates effective communication, promotes accountability and transparency and sending feedback to the citizens on the state of local affairs. When communication takes place between the local governing body and the governed, the government provides feedback promptly through internet facilities. Effective communication implies understandable message between two or more people that engage in a conversation. E-governance provides the template for effective communication at the grassroots level. The communication may be in form of local language which must be decoded by the receiver of the message. When government provides room for openness in all its dealings through the open access information communication technology (OAICT), it will promote accountability and transparency in the management of public affairs.

E-governance Promotes linkage between government, business, nongovernment organizations, and other groups in society. E-governance as a reform strategy for improving the governance process could also improve the relationship between government and other groups in society, particularly the business sector. The business focus is in recognition of two things: its importance as a service provider to government's own needs and, at the same time, as a partner of government in responding to the needs of the public through outsourcing, given government's limited capacity; and the sector's apparent role in economic development. Tourism information also promotes linkage with business by providing a snapshot of the city's investment potentials, which private businesses need in their own decision making processes.

Such information could also help boost the local economy by attracting local and foreign tourists (Sier, 2005). For all countries resolved to fight poverty and accelerate overall social and economic development, the implementation of e-governance can make a valuable contribution. It can help to create new jobs, foster the development of business, enhance citizens' participation in decision-making and improve the efficiency of government services. In that sense, e-governance can contribute to capacity-building in Africa, improve the accountability of governments and enhance citizens' trust in them (UNESCO, 2007).

New technologies can support effective decentralization and expand its benefits. They create new relationships and enable collaborative work across time and distance. They create better conditions for the decentralization of resource management as Integrated Financial Information Systems (IFMS) allow for shared and timely management of information, traceable transactions, and the implementation of various accountability measures (Maswood, 2009). Corroboratively, Urban and rural divide can now be minimized through application of ICT services, bridging the gap. However, governance is often quoted for urban/metropolitan areas, whether that governance reaches across the void, is where innovation of governance mechanisms can be manipulated. Globalization has further diffused that division and now there is unlimited potential through which rural areas can achieve sustainable, self reliant, localized economy. Participation of private and public actors will stimulate the process of governance while trust and accountability factors will harness ICT empowered stakeholders. Such is only possible if weaker side of the equation is given adequate resources (water, power, land, sanitation) and is provided with standardized services across board. Barriers to minimizing the divide would lay largely with agency and bureaucracy intervention as well as capitalist corporate gains through unfair means. Ethical and good e-governance is the only sustainable solution in an ICT enabled urban and rural environment (Hina, 2007).

The diagrammatical model (Figure 6) for e-governance at the grassroots level may be sustained through the application of information communication technology in Nigeria, therefore the various components of e-governance are explained below:

**E-participation:** Participation in local affairs becomes paramount in democratic society; e-governance promotes citizens participation while the elected representative becomes more accessible through the provision of information communication technology. This modern system of communication encourages citizens to be involved in the local decision making. According to Hina (2007) successful e-governance mechanism can only operate through strong private and public participation. Trust and accountability will play a vital role in converting the potential to reality. Awareness is pivotal to create

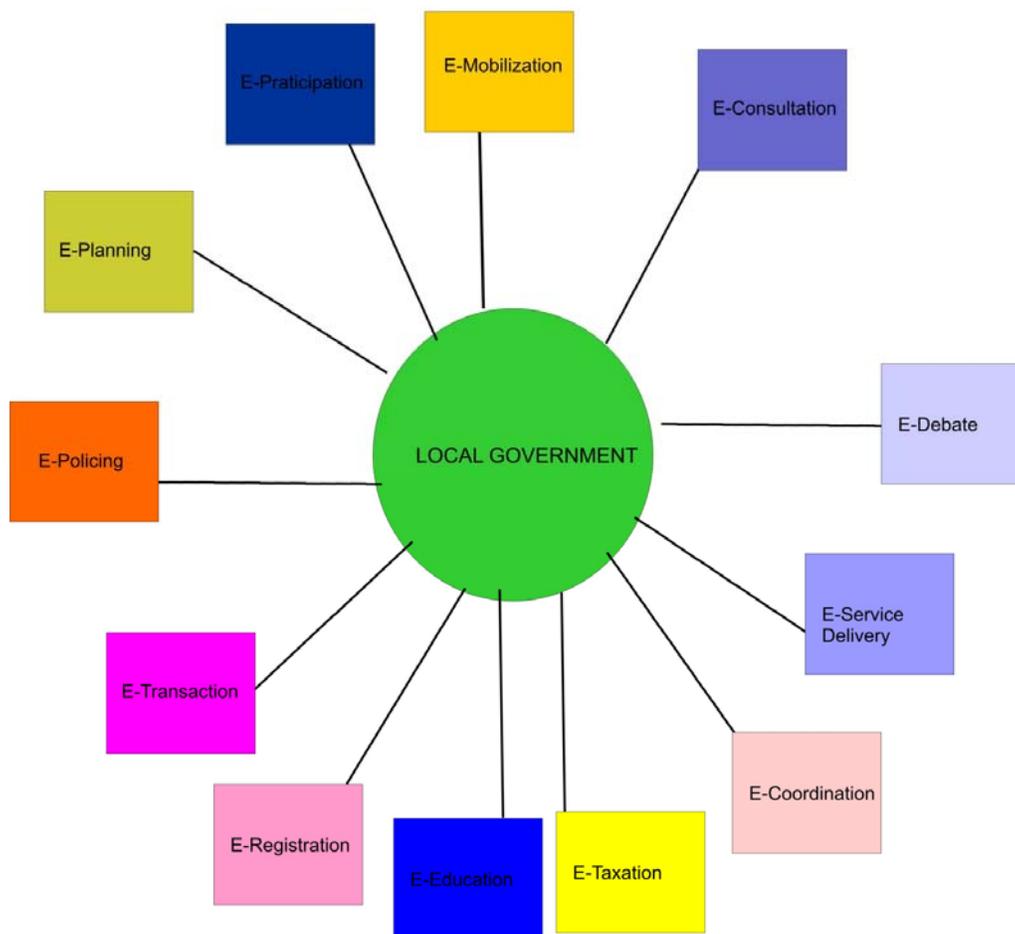


Figure 6. E-governance model at grass root level. Source: author.

such participation, yet literacy plays an important role in obtaining it. ICT will provide that enabling environment. The participatory approach must be translated within each process of e-government institution be it at the local or state level through horizontal and vertical integration. This participation would follow the earlier model where business citizen, individual, marketplace, employees and institutions have direct access to government services, maximizing interaction through online transactions. One way of achieving such is through mandatory adaptation of offline financial services in a secure online framework thereby minimizing the cost to government. Participation must occur through electoral process as well as e-voting mechanism, ensuring democratic e-governance.

**E-mobilization:** E-Mobilization may also foster citizen's participation in local decision making and community projects. For instance, the activities of Community Development Association can be placed on the government data page, informing the citizens to participate in communal project. This avenue will facilitate peoples participation in ensuring grassroots development

**E-consultation:** The programmes of government

become informative through the application of ICT at the grassroots level. When the activities of government are widely and popularly disseminated, it makes the citizens informed on the various programmes provided for the sustainable grassroots development. Sier (2005) corroborates this argument that the increased availability of political information using e-governance is envisioned to improve participatory democracy. The publication of information on the local policymaking process such as those that could be found in the minutes of meetings of the City Council, the city's legislative body, promotes accountability of elected officials to their electorate, thus enhancing their representative role. For the citizens, information on both the process and the outcome (resulting ordinances) may raise their appreciation of the policymaking process, including the role of their elected officials, which may, in turn, increase their participation in the selection of local leaders. Consulting citizens through online polls and surveys facilitates direct feedback that could raise the quality of decision making and help promote partnership.

**E-debate:** The concept of e-debate is similar to chat over

the Internet, wherein not only the citizens but also the political leaders contesting the elections participate. The citizens give their feedback about the various policies of the parties and particularly the manifesto of the party. The initiative will further strengthen the process by enhancing the representative role, improving accessibility of citizens to their elected members and developing the capacity of elected representatives to engage in e-government. Elected members will also be provided with access to the local authority's Intranet and e-mail systems so that they become available online for decision making and people can easily access them (Sacdeva, 2002).

**E-service delivery:** The demands for effective and efficient service delivery by the citizens at the local level requires total overhauling of traditional mode of operation in Nigerian local government, therefore, there is need to re-shape the political structure of local government through information communication technology in order to meet up with the current technological challenge. E-governance promotes effective and efficient social service delivery at the grassroots level such as immunization, vaccination, waste management etc. In many developed nations of the world such as United Kingdom and United State of America, the local governments are capable of rendering effective and efficient services through the functional internet platform provided by the local councils.

**E-coordination:** Coordination is very important in the management of public affairs, therefore e-coordination is a platform where the government

**E-taxation:** E-taxation is another area where citizens can pay their taxes such as property tax, tenement rates, income tax and so on through online payment. This is even more convenient and secure for every tax payers to that of manual approach.

**E-education:** In a democratic society such as Nigeria, civic education is bedrock through which sustainable democracy could be realized. This involves information relating to citizen's democratic exercises such as voting eligibility and sensitization towards citizen's political rights etc. The adoption of internet facilities may enhance the actualization of these various programmes that may benefit the citizens at the grassroots level in Nigeria. According to Norris (2002), democracy requires two-way communication as well as information, at regular intervals beyond elections, so that political leaders receive feedback and maintain contact with the grassroots. Many commentators who advocate 'strong' or 'direct' democracy commonly argue that these functions are not well served by e-governance, and this criticism has some value if judged by government websites alone. The opportunities for 'bottom up' interactivity in communicating with official departments are far fewer than the opportunities to read 'top down' information.

**E-registration:** This may involve registration of birth certificate, Motor Vehicle, Driving License, local government identification letter, employment opportunities, Domicile Certificate, trade permit etc. All these may be done on the

website without being physically present at the local government.

**E-transaction:** This implies business engagements between the citizens and the government or private institution and the government. Through online facilities, this can facilitate effectiveness and efficiency in the day to day governmental business.

**E-policing:** Security of lives and properties is the primary responsibility of any responsible government all over the world. Therefore, e-policing could be a platform for citizens to alert the security agency of the major issues related to security in the community and this will also facilitate adequate feedbacks.

**E-planning:** Planning is very important for any organization to survive be it private or public. E-planning involves informing the general citizens of the policies and programmes of government before the final implementations. The citizens therefore may provide advice and share their view towards government initiatives to enhance better outcomes.

## CONCLUSION AND RECOMMENDATIONS

The raison d'être for the application of e-governance for sustainable grassroots development in Nigeria has been examined in this study. E-governance promotes participatory democracy, provides adequate information about political process and enhances faster social service delivery at the grassroots level. The adoption of information communication technology makes governance inclusive, efficient, responsive, transparent, accountable and more participatory which embodies the elements of good governance at local level. Application of modern technologies may facilitate the current struggle against corruption at the local government level; the government becomes more institutionalized and transparent in its local political rendezvous. This could be easily achieved through the adoption and application of information communication technology (ICT) at the local level. The various programmes of government such as vaccination, waste management, registration and some other services rendered by the local government become more circulated among the local dwellers; therefore, e-governance has been a political strategy to ameliorate people's predicaments through the modern technological facilities at the grassroots level. While this study suggest that policy should be made at the national level to enhance and facilitates the usage of information communication technology at the local level as well as training and re-training of local government personnel in the area of information communication technology (ICT) become an imperative for rapid grassroots development in Nigeria.

## Conflict of Interests

The author have not declared any conflict of interests.

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