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Application of E-governance to State Administration: How Ready Is Ebonyi State of Nigeria

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ABSTRACT

The views of the citizens in a state should be considered in order to formulate the policies that are citizen centered. To achieve this, the state should be able to listen to and interact with its citizens anywhere, any time and in the citizens' preferred medium. In Ebonyi State and most states in Nigeria, the people are made passive stakeholders in state administration and that brings about distrust and apathy towards electioneering and governance in general. This paper presents an assessment of the readiness of Ebonyi State-Nigeria for the introduction e-governance into the state administration. Data was gathered from a primary source through a structured questionnaire distributed to 500 respondents in the three (3) senatorial zones of the State. The study used a 5-point *linkert type* scale and a systematic analysis of the responses from 95.8% (497) of the questionnaires returned with valid responses. It was established that 100% of the respondents owned at least a GSM phone and also have a phone call centre in their communities no matter how rural the communities were, 98% of the respondents were of the opinion that government services could be delivered to citizens, organizations and other government departments through GSM and android phones. The study observed that GSM and Android phones were the most common means of information communication among the respondents. 98.8% of the respondents did not know whether Ebonyi State government had a functional website or not. The study showed that the issue of illiteracy would not prevent Ebonyi State-Nigeria from introducing egovernance, rather the challenges of steady power supply, poor communication infrastructure and high cost of computer and internet equipments were the major hindrances to surmount.

Keywords: e-governance, state administration, Internet, ICT and good governance.

INTRODUCTION

Governance has to do with the exercise of political power for a just and enduring management of resources (both human and material). The purpose of governance is to ensure optimal benefits of resources management to the citizenry of the nation. In Nigeria, the operational constitution in Nigeria (the 1999 constitution as amended) identifies three tiers of government namely; federal, state and local governments. Each of these tiers of government has defined functions to render to the citizenry. Before 1999, Nigeria had gone through a series of *militarized* democracy. In those years, state governors were appointed mainly as sole administrators. The appointed state governors and other state executives performed their duties which include but not limited policy formulation and implementation to please their boss without minding how the policies affected the people. The people had no contribution to the policy formulation of the government. So the people were only on the receiving end of government policies and programmes.

Since the emergence of civil democracy in 1999, the states had better autonomy because the state governors were elected by the people. From then, a set of new generation of state governors started emerging. These were men coming into politics with a strong private sector background, determined to make their marks by results rather than patronage. These governors started tackling energetically the legacy of stagnation and decay. If the pursuit will succeed, there must be a platform to enable the citizenry to participate in governmental decision making process; a platform where everyone will be

given equal opportunities to express their views about government policies and programmes without the fear of being victimized.

The use of Information and Communication Technology (ICT) in governance readily comes to mind when we talk about giving people equal opportunities and access to government. In the realm of government, ICT applications have the features to enhance the delivery of public goods and services to citizens not only by improving the process and management of government, but also by redefining the traditional concepts of citizenship and democracy.

The introduction and use of ICTs in governance are actually a means to improve the process of governance. The framework of e-governance, enables the partial automation of the major state functions and sectors (which include: Legislative, Executive, Judiciary), thus facilitating the optimal functioning and better interaction of institutions attached to these three major wings of the state. Within the government framework, ICTs allow better interaction between the government, its institutions and the people.

To understand the necessity for ICTs in governance, one must first consider whether the provisions of the basic services are basic to the survival of the community. Basic services are "those activities that lead to the satisfaction of 'basic needs'. According to [1] [2], basic needs range from the "minimum physiological needs" to a set or package that covers:

- (a) needs which pertain to the basic necessities of life , such as food, water, clothing, fuel;
- (b) needs which enhance the general welfare of the people;
- (c) needs which improve access to the means of production and economic opportunities, such as natural resources, capital (including technology), employment opportunities and income; and
- (d) needs which give a sense of security and freedom for decision making, such as human rights, political participation, social security, social defense and rule of law.

Bearing this characterization of basic needs in mind therefore, ICTs can unmistakably be seen as instruments that enable people to satisfy their basic needs. [3] stated that critics argue that people had, survived before now, in their societies without ICTs and further presented that all should take into consideration the fact that societies, like all organizations, exist in an environment that is constantly changing. ICTs though not in the category of basic needs directly, the role of ICTs in development cannot be overemphasized. ICTs bridge the information divide which determines the value societies place on the basic needs listed in (a) to (d) above. According to [4], an information society requires information age governance and information age citizens. ICT infuses greater effectiveness and transparency in government, and at the same time creates market opportunities for goods and services.

Based on the fact that people, government and organizations deal with information in all of their daily activities, access to ICT can expand opportunities. All organizations in one way or the other handle information in making decisions, developing plans, giving orders, and informing other people. There is constant flow of oral and written communications between people and organizations. The transmission could be through the phone, fax machine, computers, or through the "grapevine". There will be greater efficiency, better decisions, and more effective use of resources if more accurate and reliable information can be sent more rapidly to the people who need them [5]. These listed features are what ICTs offer. Access to ICTs is about expanding people's choices and not about making choices for them. ICTs should be seen as an effective channel for delivering basic services like healthcare and education to the citizenry. It helps to build and maintain social capital by keeping people in contact and create networks of individuals with the same interests. It serves as a means for transferring different resources, both financial and knowledge based in a dramatically less expensive, less time consuming and less dangerous than the physical transportation of people and documents/information

LITERATURE REVIEW

The implementation and use of ICT solutions can support governance reforms. Egovernance has become more and more present around the world in this decade. Internationally, most countries are in the early stages of e-governance implementation.

A good progress has been made in Europe, USA and in other Westernized countries such as Australia and Singapore. In the recent years, developing countries and their citizens have joined others to benefit from e-governance. Solutions to development issues often require changes to government processes, usually with the objective of generally to improve efficiency and effectiveness and to save costs. The driving force can also be public demand for online services and information that increase democratic participation, accountability, transparency, and the quality and speed of services.

In the words of [6], a situation in which all interaction with the government can be done through one counter 24 hours a day, 7 days a week, without waiting in lines at government offices is possible even now if governments are willing to decentralize responsibilities and processes through the use of electronic means such as the Internet. Each citizen can then make contact with the government through a portal where all forms, legislation, news and other information will be available. Of course, at first the front office will retain several communication channels, such as physical counters, telephone, e-mail and Internet to serve everyone properly. Commercial banks in Europe, the USA, Africa and Asia have adopted this concept. Most banking transactions are now done at an ATM, by mail or through the Internet. Only in a few very special situations one has to go to a physical counter to carryout a transaction. This has saved banks an enormous amount of costs. In other words, they do more work, with less people, in less time and with less and smaller offices. Government, as a collector and source of information, can also follow this trend, in order to serve its customers (citizens, businesses, and other interest groups) better and to save costs by making internal operations more efficient.

E-governance defined

E-governance (Electronic governance) is a combination of the words *electronic* and *governance*. In this era of information revolution, every sphere of human activity has been revolutionized by electronic appliances in different machines especially the computer. *Electronics* in this context includes all devices like radio sets, television, telephones, computers, Global System of Mobile Communication (GSM) phones, the Internet, etc.

"Governance" has been defined by various authorities in though different, but related ways. United Nations Development Programme [7] viewed governance as the exercise of economic, political and administrative authority to manage a country's affairs at all levels. It is about the process by which government, the private sector, citizens and groups articulate their interests, mediate their differences, and exercise their legal rights and obligations. The United Nations Educational, Scientific and Cultural Organization (UNESCO) defined governance as 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. The World Bank in 1997 identified governance as having three distinct aspects thus: (1). the form of political regime; (2). the process by which authority is exercised in the management of a country's economic and social resources for development; (3). the capacity of governments to design, formulate and implement policies and discharge functions.

According to [8], the concept of governance denotes the use of political authority and exercise of control in a society in relation to the management of its resources for social and economic development. The Institute on Governance (2003), opined that governance comprises the institutions, processes and conventions in a society which determine how power is exercised, how important decisions affecting society are made and how various interests are accorded a place in such decisions. The Commission on Global Governance (1995) defines it as the sum of the many ways individuals and institutions, public and private, manage their common affairs. It is a continuing process through which conflicting or diverse interests may be accommodated and co-operative action may be taken. It includes formal institutions and regimes empowered to enforce compliance, as well as informal arrangements that people and institutions either have agreed or perceive to be in their interest.

From the preceding study of the different definitions by leading institutions, governance is a term by which power is exercised. It is now clear that the concept of governance denotes a "participatory process". Governance has such attributes as accountability, transparency, access, inclusion, rule of law and integrity. In the

remaining part of this section, we will attempt to provide a working definition for the term e-governance.

In their different opinions, [9]; [10]; [11], said that e-governance refers to the processes for ensuring e-government. According to [12], e-governance is "the public sector's use of information and communication technologies with the aim of improving information and service delivery, encouraging citizen participation in the decision making process and making government more accountable, transparent and effective". The pacific institute of management in India considers e-governance to be "application of ICTs to the process of government functions to bring out simple, moral, accountable, responsive and transparent governance" [13]. The African training and research centre in administration for development (CAFRAD) defines e-governance as "the use of ICTs, and especially the Internet, to adopt a new conception and attitude of governance and management where participation and efficiency are required of all the stakeholders linked in a network" [14]. The definition presents e-governance as a new way of cocoordinating, planning, formulating and implementing decisions and operations related to governance problems. It can be used by governments "to re-invent themselves, get closer to the citizenry and forge closer alliances and partnerships with diverse communities of interest, practice, expertise, conviction and interdependence within the context of national and international development agenda" [15].

In this paper, we are adopting e-governance as the application of information and communication technologies (ICTs) in (1) the delivery of government products and services, exchange of information, communication, transactions and system integration between government and citizens and government and businesses, (2) in the internal government operations to simplify and improve democratic, government and business aspects of Governance. In this sense, the "e" in e-governance denotes:

Efficiency: Governments should use ICTs to minimise transaction costs and streamline their bureaucratic procedures, making their operations more efficient, freeing up resources that enable them to deliver services in a better, more organised and economical manner.

Effectiveness: Governments can achieve better results and meet development goals by using ICTs to increase the relevancy of the policy formulation process through increased participation, improve the process of resource allocation, responds timely to citizens' needs and increase coverage and quality of their services.

Empowerment: ICTs can support increased interaction between citizens and their governments, for citizens both to participate in the decision making process and to become more aware of their personal and community development.

Economic and social development: Beyond the economic benefits that accrue to government due to efficiency and effectiveness gains, the use of ICTs in government and in its interaction with the business community and citizens can create new businesses, attract investments and generate employment.

E-governance in Relation to Good Governance: The strategic objective of e-governance is to support and simplify governance for all the stakeholders namely: government, citizens and businesses. The use of ICTs can connect all three parties and support processes and activities. In other words, e-governance uses electronic means to support and stimulate good governance. Therefore the objectives of e-governance are similar to the objectives of good governance. Good governance can be seen as an exercise of economic, political, and administrative authorities to better manage the affairs of a country at all levels, national and local. While governance is a neutral concept, good governance addresses the allocation and management of resources to respond to collective needs. Though a universally agreed position on what constitutes good governance may be hard to come by, conceptually, it is characterised by the principles of participation, transparency, accountability, rule of law, effectiveness, equity and strategic vision (UNDP, 1997).

Good governance systems are participatory because they are based on democratic principles where the stakeholders in governance have a voice in the decision making process. Also the procedures and methods of decision making reflects transparency in order to ensure effective participation. The good governance system aims at "improving economic efficiency, protection and restoration of the environment and enhancing the wellbeing of the people" (International Institute of Sustainable Development, 1995). For [16], the idea of adopting ICTs in governance is to move government beyond passive information-giving to active citizen involvement in the decision making process and this is what good governance is all about. Therefore e-governance has the potentials to bring about good governance.

Good governance rests on the pillars of knowledge and recognition of this set of knowledge by the leaders and the led alike. Good governance is the desire of all citizens. Digitization of this entire set of knowledge within a network which is open to all individuals opens up possibilities for all to access and use this knowledge. The Introduction of e-governance in state administration ensures that citizens can participate in governance, and influence decision-making processes in their state. This is necessary because policies made are for the citizen and they affect them closely. Citizens will no longer remain passive recipients of governance services provided to them, but can pro-actively decide the types and standards of governance services they want and the governance structures which can best deliver them [8]. ICTs can influence governance processes technically through the automation of repetitive governance tasks and thereby improving efficiency of governance processes; supportively through the use of ICT to complement existing efforts and processes; and innovatively through the initiation of new governance services or new mechanisms for improved service delivery. The Concept of e-Governance in State Administration: The concept of e-governance is closely related to that of e-commerce. E-governance emerged in an attempt to translating the gains made in business through e-commerce into state administration. From the on-going, the three main distinct groups interacting in e-governance are government, citizens and businesses/interest groups. Abbreviations used in ecommerce such as B2B (business to business) and B2C (business to consumer) are used in e-governance to describe which of the main groups are interacting. The most common group interactions in e-governance are G2C (Government to Citizen), G2B (Government to Business) and G2G (Government to Government). The interaction between the following groups in state governance is presented schematically in figure 1.

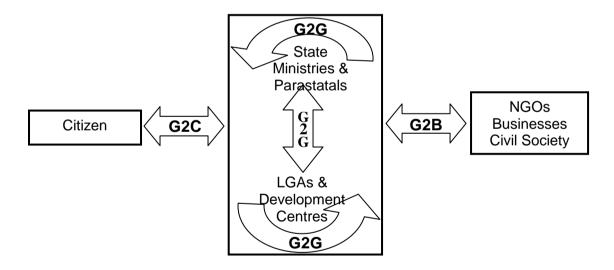


Fig. 1: Main groups interacting in e-governance (adapted from Backus, 2001)

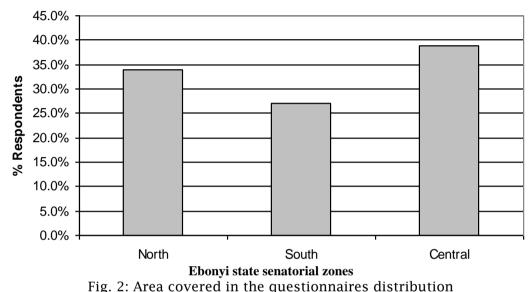
METHODOLOGY

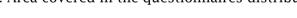
In this paper, we used questionnaires as the instrument for data collection. We distributed a total of 500 questionnaires to respondents around the state. The questionnaire was designed to assess the readiness of the stakeholders for the adoption of e-governance strategies for state administration in Ebonyi State. Table 1 shows the representation of the questionnaire administration. We addressed various aspects of e-governance in the questionnaire (see sample of the questionnaire in appendix A).

Table 1: Questionnaire administration		
No. of questionnaires Distributed	500	100.00%
No. Returned	486	97.20%
No. invalid/Discarded	7	1.40%
Total number used	479	95.80%

RESULTS PRESENTATION AND ANALYSIS

Areas Covered In The Survey: The participation in the survey was restricted to Ebonyi State indigenes and non indegenes resident in the state at the time of the survey. The questionnaires were distributed to respondents in the three senatorial zones of the state namely:- Ebonyi North, South and Central zones. The percentage area of distribution of the questionnaire is shown in the bar chart of figure 2.





Age Distribution of Respondents

The age spread of the respondents is shown in figure 3. An interesting observation is that a cross section of the population was sampled. We deduced from the survey that greater number 68% (i.e. for ages between 20 – 55) of the respondents earn some kind of salary, reside in other towns different from their home towns where there is computer business centres and as well have minimum qualifications of senior school certificate. Few respondents (15%) are below the age of 20 years and are either secondary school levers or students

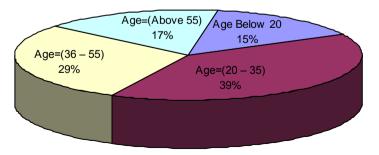
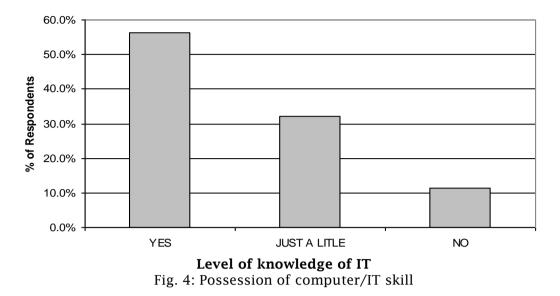


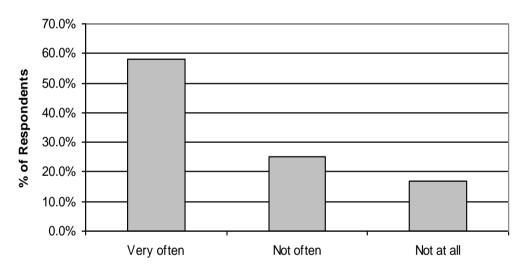
Fig. 3: Age Distribution of respondents

Possession of computer/IT skills is an important factor in e-governance implementation. When asked whether they know how to operate computer, figure 4 shows that 56.4% of the respondents said "yes", 32.2% said "just a little" while only 11.5% answered "no". Of the number that has the skill, they acquired the knowledge through private training personally funded by them or their guardians.

Onu

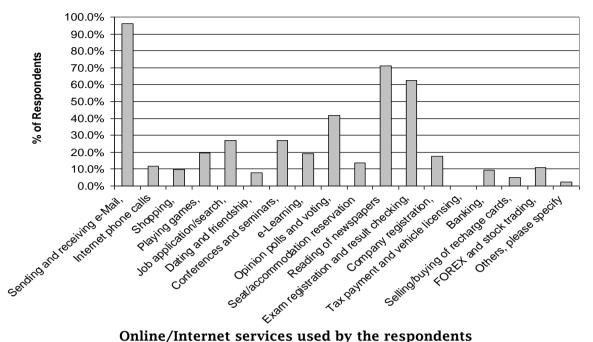


Considering the frequency at which respondents use Internet services, figure 5 shows that greater number of the respondents 58.2% use Internet/Online services very often, 25.1% use it rarely (not often) while 16.7% do not use it at all.



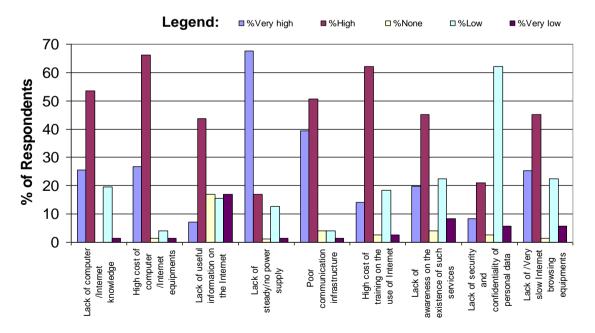
Frequency of use of IT Fig. 5: Frequency of usage of internet/online services

The respondents that do not use IT services at all were mainly respondents from the villages that do not have computer business centers with internet services. Also their educational qualifications were below school certificate attempted.



Online/Internet services used by the respondents Fig. 6: Type of Internet/online services use

Type of Internet/online services used by the respondents is represented in figure 6 and from the figure, we have that 96.0% of the respondents who use the internet use it to send and receive e-mails. 71% use it to read newspapers and other news journals. Examination registration accounts for 62.6%, opinion polls and online voting 42%, conferences and seminars 26.9%, job search and applications 27.1%. Playing of games accounts for 19.4%, E-learning 19.2%, company registration 17.5%, etc. Here we have to note that no respondent uses the internet for just one service, rather each respondent uses more than fours services of the internet.



Factors that hinder the use of e-governance services Fig. 7: Factors affecting the use of e-governance services in Ebonyi State.

It is important to note also that it was observed that some people who do not know how to operate computer also use some of the internet services available, especially, examination registration and e-mail services.

Figure 7 shows the response of stakeholders in connection to the factors that hinder the use of e-governance services in Ebonyi State. These responses of stakeholders were studied and measured on a 5-point *likert-type* rating scale. The result shows that the most pronounced hindrances are lack of steady power supply, poor communication infrastructure, high cost of computer/internet equipments. Lack of computer/internet knowledge, high cost of training on the use of internet, lack of/very slow internet browsing equipments and lack of awareness on the existence of such services were next strong hindrances. The other factors considered namely: Lack of useful information on the internet and lack of security and confidentiality of personal data were low in the *likert-type* scale which shows that the respondents were of the opinion that the two factors were not strong hindrances to the use of e-governance services in the sampled community.

Concerning the extent e-governance would affect some features of personal and public (government) information, the respondents opined that the factors considered will all be positively affected. That is to say that e-governance will promote certain democratic principles and ideologies (figure, 8).

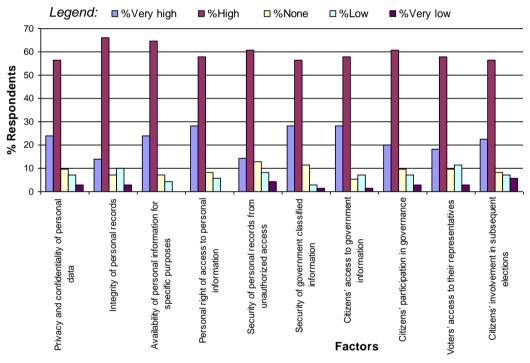


Fig. 8: Effect of e-governance on some factors of information.

The expectation of the citizens on the government is usually very high and varied too. In this research, we decided to find out the specific information the citizens expect from the government and the level of such expectation. This will enable us make proper representation in the portal system to be developed.

The findings represented in figure 9 shows the types of information stakeholders in state administration expect from the government and the level of such expectation. Using the *likert-type* scale, respondents were mostly interested in information that has to do with Education and Scholarship opportunities, Culture and tourism, Employment and vacancies, State and LGs budgets and their implementation, Roads, bridges and other infrastructural developments, Laws, edicts and proceedings of the house of assembly, Agriculture and health information, Performances of political and public office holders, Security and economic indicators, Community and local government projects and their sponsorship, and Embezzlements, Corrupt practices and actions taken.

Furthermore, investigation was carried out on the level of impact e-governance would have on the characteristics of information. Figure 10 presented stakeholders' responses which show that the respondents were of the opinion that all the factors studied would

receive positive impact. Accuracy of information processing and management which is close to 5 would be the most positively impacted factor. The other factors viz: effectiveness and efficiency of government operations, accountability and prudence use of public funds, easy access to government services, timely service delivery to citizens and organizations, transparency in government operations, profitability of government departments, and public trust on public office holders, competitiveness and sustenance of operations, operational cost for government services will receive their own positive impacts in the order presented.

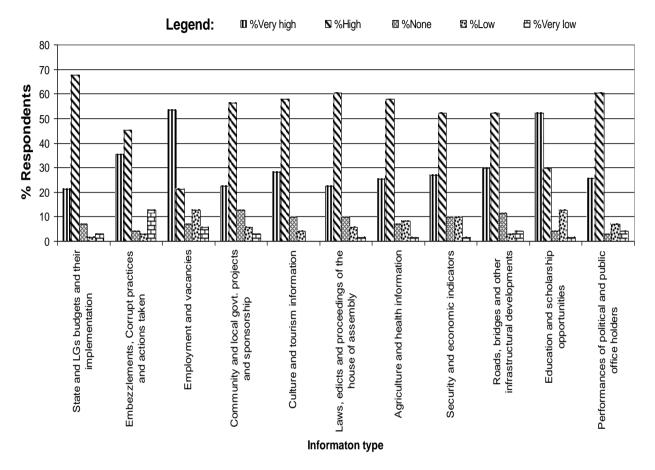
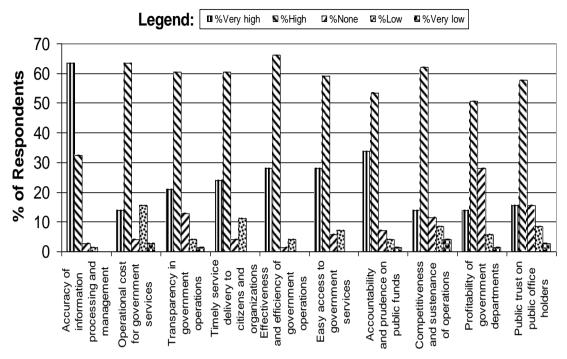


Fig. 9: Type of information and level of public expectation on government



information factors

Fig. 10: Level of impact the use of ICT has on government operation

DISCUSSION

The number of questionnaires distributed were 500 and 479 (i.e. 95.80%) were returned with valid information. This number is a statistically acceptable size of the population for analysis. The distribution of the questionnaires was spread over the study area considered for the survey in an acceptable proportion thus: Ebonyi North (34%), Ebonyi South (27%) and Ebonyi Central (39%). We observed and hereby report that 100% of the respondents owned at least a GSM phone and also have a phone call centre in their communities no matter how rural their community was. Other interesting findings include that 98% of the respondents were of the opinion that government services could be delivered to government clients (namely: citizens, organizations and other government departments) through GSM phones which incidentally forms the most common means of information communication among the respondents. The research revealed that 98.8% of the respondents do not know whether Ebonyi State government has a functional website or not and 98.7% like to know about the activities of government functionaries.

CONCLUSION

The general view from the survey was that the use of e-governance would bring improved efficiency in government operations without necessarily increasing the cost of state administration. Accountability and prudence in the management of public fund would be induced. Access to information and government services would be easier, greater access to the people's representatives, greater participation of the people in the governance processes and hence the strengthening democratic principles and ideologies. These are the real features of good governance.

So the adoption of ICT in state administration through e-governance in Ebonyi States of Nigeria and other developing countries is a sure way of bringing good governance to the people. The survey has shown that the readiness of Ebonyi State to apply e-governance is determined by how prepared the state is to tackle the most difficult hindrances/challenges facing the deployment of e-governance in Ebonyi State administration as revealed by this study. The lack of steady power supply, poor communication infrastructure and high cost of computer and internet equipments were the three major challenges.

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