

# Issues and Concepts of E-governance in Nigeria – A Reader

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(Editors)

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## Assessment of E-Governance towards Sustainable Development in Ado-Odo/Ota Local Government, Ogun State

*Oluyemi O. Fayomi, & Kayode R. Idowu*

### Introduction

E-governance is a new phenomenon in African countries, and Nigeria is steadily adopting the model. E-governance has its roots in America and Western European countries dating back to the post-Second world war period when the usage of computer system was becoming widespread. The benefits are legion with greater challenges facing its acceptability and utilization. In all, it is becoming increasingly clear that without integrating into the evolving e-governance technology, it may be difficult for any government to perform and consequently engender development of the polity. Given that e-governance is applicable in all levels of government, the third level of government in Nigeria can also leverage the benefits of the application of information and communication technologies (ICTs) to achieve their constitutional mandate as set out in the fourth schedule of the amended 1999 Constitution which specifies the duties, functions and responsibilities of the local government. This schedule amongst other things assigns local governments responsibility for primary health care delivery, construction and maintenance of local roads, drainages, environmental control and rural development. One of these local governments is Ado-Odo/Ota located in Ota town which has evolved over the years starting from the pre-colonial period when it was Ota district council under Western region. It moved on to Ifo/Ota Local Government at the creation of Ogun State and thereafter Ado-Odo/Ota was created from a merger of Ota and the southern part of the former Egbado South Local Government. The Local Government of "distinction" as it is called came into existence in May 19, 1989 with Ota as the headquarters. The local government area is also surrounded by about 450 towns, villages and settlements (Fayomi, Idow & Ayo, 2015).

The development of Ado-Odo/Ota became rapid as a result industrialization when many companies relocated their production sites to take advantage of the abundance of land, affordability and accessibility to the commercial areas of Lagos. With many administrative offices in areas such as Ado-Odo, Atan, Igbesa, Agbara, and Ijoko, Ado-Odo/Ota has quickly

become the most populous commercial and industrial nerve centre of Ogun State at an estimated population of 527,242 (Census, 2006). Mainly the local government is peopled by the Aworis, Egbados, Eguns and other sub-ethnic groups and settlers like Hausas, Ibos, Igbiras, Egbos, and Egbas. Like many local governments, Ado-Odo/Ota consists of career staff of different cadres, qualifications and professions who work with elected officials to achieve their mandate as the government engages in service delivery to the people residing in the local government area. Given their particular functions of interfacing with citizens at greater level than the other levels of government, it should be emphasized that the degree to which the staff of the local government integrate information and communication technologies (ICTs) in their administrative functions requires evaluation. This central arguments of this study focus on whether e-governance process, services, innovation and capacity building have been able to impact significantly on the lives of the people and staff of the Ado-Odo Local Government Area in Ogun State, Nigeria.

### Conceptual Clarification

The concept of e-governance has been defined extensively by other contributors in this volume. In this chapter therefore, one will briefly refer to some definitions particularly those that will quickly lead us into the research and substance of this chapter. Ayo (2004) describes e-governance as an attempt to improve the administration of government through the use of ICT, reducing the bureaucracy of government's businesses, as well as bringing about accountability in managing the affairs of the country. The goals of e-governance aligns with the goals of building an informed society which is an empowered society and characterized by increasing government and citizens' interactions to enhance feedback mechanism. There are many benefits of e-governance. However, there are also encumbrances in the application of ICTs because of attitudes of the people towards change. Hence, change is often hindered due to lack of confidence in the process by way of perceived displacement of personnel of livelihood through application of ICT. Therefore, as worthy as e-governance and e-participation portend, the realization of their full potentials could be restricted by lack of supportive infrastructure, low educational status of the proposed operators and negative mindset tendencies.

In line with the sustainable development roles of e-governance in Ado/Odo Ota local government, it is significant to note that there have been several academic terms about the meaning of sustainable development and the need to integrate ecological, economic and political principles into personal and public decision-making. However, there is no agreed definition of the concept and perhaps there is no need for one. This is because sustainable development concerns a process of change and is heavily reliant

upon local contexts, needs and interests. Thus, sustainable development is an 'emerging concept' in two ways. First, because it is relatively new and evolves as we learn to grasp its wide implications for all aspects of our live. Second, because its meanings emerge and evolve according to local contexts. (Fien, 2010).

Therefore, the term 'sustainable development' was popularized by the World Commission on Environment and Development (WCED) in its 1987 report entitled *Our Common Future*. The outcome of the report was the publication of the Brundtland Report, after the Chair of the Commission and former Prime Minister of Norway, Gro Harlem Brundtland. The definition of sustainable development proposed in the Brundtland Report and Agenda 21 has been adopted in many countries. However, the idea of 'development that meets the needs of the present without compromising the ability of future generations to satisfy their needs' has been interpreted in many different ways. In fact, several hundred different definitions of sustainable development now exist. While these definitions seek to make the broad definition from the Brundtland Report and Agenda 21 more concrete, many tend to reflect different emphases in the social, economic, ecological and political dimensions of sustainable development.

One of the most important outcomes of *Our Common Future* was the realization that environment and development issues are inextricably linked and therefore concerns about either environment or development on its own were insufficient. The World Commission on Environment and Development (1987) states that the environment and development are not separate challenges. Development cannot subsist on a deteriorating environmental resource base; the environment cannot be protected when growth ignores the costs of environmental destruction. These problems cannot be treated separately by fragmented institutions and policies. They are linked in a complex system of cause and effect. The WCED (1987) argues for an approach to development that would take into account the relationship between ecological, economic, social and technological issues. The WCED called this approach 'sustainable development', defining it as: ... development that meets the needs of the present without compromising the ability of future generations to meet their own needs. However, the ultimate goal of sustainable development is to improve the quality of life for all members of a community and, indeed, for all citizens of a nation and the world – while ensuring the integrity of the life support systems upon which all life, human and non-human, depends.

It is expedient to make some conceptual clarifications between the meanings of 'sustainable development' and 'sustainability' and the relationship between them. A report on Education for Sustainable Development in New Zealand proposes that sustainability is the goal of sustainable development – an unending quest to improve the quality of

peoples' lives and surroundings, and to prosper without destroying the life-supporting systems on which current and future generations of humans depend. Like other important concepts, such as equity and justice, sustainability can be thought of as both a destination and a journey. In a special Millennium Summit in 2000 where a special United Nations Millennium Declaration was adopted by the UN General Assembly, the UN Millennium Declaration emphasised the social aspects of sustainable development and the importance of overcoming poverty and inequality. It declared that sustainable human development is central to world peace and future progress (UN Millennium Declaration, 2000).

It is in the goal of poverty alleviation that sustainable development intersects with assumptions about the role of ICTs in development, a subset of which is e-governance. The question therefore concerns how the integration of ICTs in socioeconomic and political processes can lead to poverty alleviation in a sustainable manner in a local government context. As noted earlier, Ado/Odo Ota is fast becoming the hub of industry in Ogun State. The abundance of land and its proximity to Lagos makes it a magnet for manufacturing companies seeking production sites outside the saturated Lagos business environment. The presence of these companies presupposes a high level of ICT usage especially as workers in the factories must stay connected to their headquarters outside Ado/Odo Ota. Does this then influence ICT adoption by the government of Ado/Odo Ota particularly in the pursuit of its Constitutional mandate of providing the basic needs of citizens at the grassroots level? If so, is there any impact on sustainable development? This research set out to explore these questions through an examination of the patterns of ICT in the local government.

### **Research Methodology**

The survey method of data collection was used for the study. This involves a descriptive approach in its design. A reliable scale for the variables of sustainable development, e-governance services and process, e-governance innovation, and capacity building were measured on a five point Likert scale. The research instrument consists of two major parts. The first part refers to the descriptive information of the respondents which comprises respondents department, age and gender distribution, educational qualification and marital status for individual participants. The second aspect deals with content that relates to the variables used to for the empirical validation of the study hypotheses. This consists of constructs developed from scale variables that measured the impact of e-governance services and process on sustainable development and the nature of the relationship between sustainable development, capacity building, e-governance and sustainable development with specific focus on Ado-Odo Ota Local



Government Area of Ogun State, Southwest Nigeria. The sample size of the study includes staff and workers in this local government area in the state and 10 members of staff from two departments at Covenant University, Ota. In this design the researchers utilized simple random sampling in selection the subjects. The study covered 18 departments of the local government area and faculties from two departments from Covenant University. The multi-item scaled questionnaire was self-administered to the target audience in five local governments. Rigorous efforts were made to follow up, monitor and supervise the target audience on the filling of the questionnaire but without influencing the responses. A total of 169 questionnaires were properly filled, retrieved and analyzed out of the 200 that were administered. The response rate of 85% suggests a good response though the researchers encountered some constraints concerning the unwillingness on the part of few respondents in answering some questions.

For the analysis, we used both descriptive and regression techniques in the method of data analysis. The descriptive analysis considered the general characteristic of the respondents. The regression aspect examined the hypothesis of a significant impact of e-governance process and service on sustainable development and whether there exist a significant relationship between capacity building e-governance innovation and sustainable development in Ado-Odo local Government Area of Ogun State and Nigeria in general.

### **Hypothesis I**

H<sub>0</sub>: e-governance process and services have no significant impact on sustainable development of Ado-Odo Local Government Area in Ogun State Nigeria

H<sub>1</sub>: e-governance process and services have significant impact on sustainable development of Ado-Odo Local Government Area in Ogun State Nigeria

### **Hypothesis II**

H<sub>0</sub>: Capacity building and e-governance innovation play no significant role in sustainable development of Ado-Odo Local Government Area in Ogun State Nigeria

H<sub>1</sub>: Capacity building and e-governance innovation play a significant role in sustainable development of Ado-Odo Local Government Area in Ogun State Nigeria

**Table 14-1: Reliability Statistics**

Scale	Cronbach's Alpha	No. of scale items
e governance process	0.647	6
e governance services	0.625	5
Sustainable development	0.825	6
e-governance innovation	0.775	3
e-governance and sustainable development	0.854	17

The alpha co-efficient for e-governance process (0.647), e-governance services (0.625), sustainable development (0.825), e-governance innovation (0.775), e-governance and sustainable development (0.854) suggests the degree of the reliability for all the scale variables (Table 14-1). The result indicates that all the scale variables met the criteria for internal consistency of the research instrument.

**Table 14-2: Department**

	Frequency	%	Valid %	Cumulative %
Works	10	5.9	5.9	5.9
Administration	27	16.0	16.0	21.9
Agriculture	22	13.0	13.0	34.9
Information	10	5.9	5.9	40.8
Community Development	3	1.8	1.8	42.6
General services	13	7.7	7.7	50.3
Finance	11	6.5	6.5	56.8
Finance and Supplies	12	7.1	7.1	63.9
Water supplies and environmental sanitation	17	10.1	10.1	74.0
Medical and Health	6	3.6	3.6	77.5
Works and Housing	2	1.2	1.2	78.7
Nursing	3	1.8	1.8	80.5
Works and Housing	1	.6	.6	81.1
Budget and planning	3	1.8	1.8	82.8
PRS Dept	1	.6	.6	83.4
Primary Health Care	6	3.6	3.6	87.0
Physical planning	5	3.0	3.0	89.9
Audit	7	4.1	4.1	94.1
Unions	1	.6	.6	94.7
Sociology	9	5.3	5.3	100.0
Total	169	100.0	100.0	

The frequency analysis of the distribution of participants by department (Table 14-2) shows that Administration 27(16%) and Agricultural 22(13%) has majority of the respondents, followed by Water Supply and Environmental Sanitation 17(10%), General Services department 13(7.7%) Finance and Supplies 12 (7.1%). Majority of respondents (75 or 44%) were in

the age bracket of 36-45 years, 48 (28.4%) were aged 26-35 years, 17 (10.1%) were between 18 and 25 years while 29 (17.2%) were 45 and above. On gender, there were 88 (52.1%) male respondents and they constitute more than 52% of the total respondents while the remaining 81(47.9%) were female. A descriptive analysis of the educational qualification of the respondents suggests that majority of the respondents 107 (63.3%) among the local government staff were graduates while 62 (36.7%) are undergraduates. This therefore suggests that greater proportion of the work force is skilled workers. Finally on demographics, 39 (23.1) of respondents were singles while majority 130 (76.9%) were married.

### E-governance and Sustainable Development

The model summary statistic provides evidence of a good fit and indicates that 40 percent variability in sustainable development is explained by the changes in e-governance process and service provision. The result of the ANOVA indicates the result analyzed model for sustainable development is confirmed significant at 1 percent level as supported by the estimated F-statistic (54.172; F-Sig=0.000). This further provided the statistical validity for the analysis of the obtained result leading to the rejection of the null hypothesis of model being equal to zero.

**Table 14-3: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-2.028	2.225		-.912	.363
E-governance process	.566	.100	.387	5.679	.000
E-governance services	.510	.100	.348	5.105	.000

a. Dependent Variable: Sustainable Development

Estimates indicate that e-governance process services are significantly correlated with sustainable development at 1 percent levels. There is a proportionate direct relationship between sustainable development and e-governance process and services provision. The model summary result shows that 87.5 % of the total change in sustainable development is jointly explained by capacity building and e-governance technological innovation constructs within the estimated model. This shows an acceptable good fit for the model.

The ANOVA result ( $F$ -statistic=580.976, sig 0.000<0.01) certifies the model statistical significance at 1 percent level. This therefore leads us to the rejection of the hypothesis that the model estimate is statistically equal to zero. Thus we proceed to the analysis of the reported result below.

**Table 14-4: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.134	.879		.152	.879
Capacity building	.436	.079	.165	5.543	.000
e- governance innovation	1.491	.051	.860	28.987	.000

a. Dependent Variable: Sustainable Development

Table 14-4. shows the coefficient estimate for the test of the second hypothesis. It further reveals there is a significant and positive relationship between capacity building e-governance innovation and sustainable development. The result of the coefficient estimate shows that there is a significant relationship between sustainable development and e-governance process and services at 1 percent level of significance. The result further indicates that e-governance process (0.566, sig. =0.000) and e-governance service provision (0.510; sig=0.000) have a significant impact of 56.6 and 51% on sustainable development when fully implemented in e-governance administration. With this evidence from the study we reject the null hypothesis that e-governance process and service have no significant impact on sustainable development of Ado-Odo Local Government Area in Ogun State Nigeria and accept the hypothesis stating that e-governance process and service have a significant impact on sustainable development of Ado-Odo Local Government in Ogun State Nigeria.

An analysis of the result shows a direct relationship between sustainable development, capacity building and e-governance innovation. The above relationship is confirmed statistically significant at 1 percent level of significance. A detailed analysis of the empirical evidence shows that a complete improvement in capacity building (0.436; sig. = 0.000) and e-governance innovations (1.49; sig. =0.000) will enhance sustainable development by 43.6 and 149 percent respectively. Given the evidence from the estimated result in this study we proceed to accepting the hypothesis that capacity building and e-governance innovation play a significant role in

sustainable development in Ado-Odo Local Government Area in Ogun State while we ignore the null hypothesis that capacity building and e-governance innovation played no significant role in sustainable development of Ado-Odo Local Government Area in Ogun State Nigeria in general.

### **Recommendations and Conclusion**

To enhance the effectiveness of e-governance towards sustainable development in Nigeria, accessibility to technology, information dissemination and feedback mechanism should be facilitated and adequate awareness for e-governance support in public services such as public health care and women support services in fostering sustainable development should be encouraged. Also, it is important that we adhere strictly to policies that support the use of environmentally friendly equipment that enhance green environment. For instance, effective and efficient waste management leading to waste to wealth would contribute to achieving sustainable development through technology. Use of energy efficient technology or equipment in private and public spheres and activities is highly recommended. Finally, increase in technology-enabled information and services should be made available through e-governance in order to promote interaction, business growth and exchange of necessary ideas.

To conclude, we reiterate the outcome of our research: e-governance process and services have significant impact on sustainable development. This shows that e-governance could be seen as an all-encompassing process toward sustainable development. The process involves transformative changes that bring about transformation in government's activities and programmes, changes in institutional framework and processes. E-governance services consist of online provision of basic information, use of e-tools and Internet facilities. Another important aspect of e-governance considered in this study is the capacity building and e-governance innovations. The result of this study provides evidence in support of the significant role of e-governance in capacity building to enhance voices of citizens and greater resource mobilization and innovation. Capacity building and innovation are therefore as an integral aspect of governance must be put in the right perspective to achieve significant progress towards sustainable development in Ado-Odo Local Government Area.

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