Barriers to Socio-economic Opportunities in Africa: An e-Government Perspective

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ABSTRACT

Various barriers to socio-economic opportunities in Africa are explored though e-Government as a lens of study. Using grounded theory methodology, scholarly literature on e-Government in Africa has been analyzed to model various barriers. The research is expected to serve as a scholarly reference for decision-makers in the private and the public sector organizations, as well as policymakers, for making decisions about design, development and execution of e-Government initiatives in Africa.

Categories and Subject Descriptors

K.4.1-3 [Computing Milieux]: COMPUTERS AND SOCIETY
public policy, social issues, organizational impacts

General Terms

Economics, Human Factors, Legal Aspects

Keywords

e-Government in Africa, Socio-economic Opportunities

1. INTRODUCTION

Since the year 2001, e-Government has emerged as a *programmatic* tool for executing government operations with a key focus on offering government services to citizens [1, 2, 3, 4, 5, 6, 7]. e-Government initiatives which encourage citizens' participation in government activities act as p*articipatory* tools through which citizens can contribute actively in government thereby bolstering the core notion of democracy.

UN defines e-Government as "…use of ICTs and its application by the government for provision of information and public services to the people [8]." United Nations has championed deployment of information and communication technologies (ICTs), an indispensible construct for building e-Government initiatives [2]. Various UN e-Government readiness assessment surveys measuring "willingness" and "capacity" of more than 178 member states of UN infer e-Government to be a gateway to socio-economic opportunities which eventually lead to a creation of a knowledge-based society in respective member states [3,4,6]. Hence, various factors influencing the successful implementation of e-Government initiatives also affect socio-economic opportunities experienced by citizens. e-Government being one of the gateways to socio-economic opportunities for citizens, barriers to e-Government initiatives essentially act as barriers to potential socio-economic opportunities. Past studies reveal that impacts of e-Government implementations are comparatively more visible in the context of developing nations including Africa, than the rest of the developed world [9,10]. This research will identify a set of barriers to socio-economic opportunities in Africa, which in turn influence the success of e-Government initiatives in Africa. Our research will also carve out inter-relationships among barriers to socio-economic opportunities in Africa.

2. RESEARCH METHODOLOGY

Grounded theory research methodology analyzes secondary data in the form of scholarly literature on e-Government initiatives in Africa, published after the year 2001, a milestone year in the e-Government area. According to UN e-Government Readiness Assessment Surveys, in 2001, e-Government was a new trend then and not a regular practice for governments to offer their services [2]. Hence, secondary data analysis under grounded theory research methodology focuses on scholarly literature published after the year 2001, which elaborates on barriers to socio-economic opportunities in Africa. When compared to other fields related to governance, the research on e-Government seems to be in embryonic stage. There are not many theoretical models which are derived from empirical evidences in the area of e-Government (Ridley 2008).

In the context of e-Government initiatives undertaken by U.N. member states in Africa, this research paper identifies a number of barriers to providing socio-economic opportunities to citizens via e-Government initiatives. In the first round of grounded theory research methodology, codes are identified from a vast body of literature on e-Government initiatives deployed by various member states in Africa (See Table 1). In the second round of axial coding, codes identified in the first round are labeled according to their coherence and proximity in terms of their meanings. In the third round, axial coding in the form of various

labels are grouped and key categories for barriers to socio-economic opportunities in Africa are surfaced.

Table 1. Grounded Theory Research Methodology: A Process of Deriving Categories of Barriers to Socio-economic Opportunities in Africa

	First Round of Coding	Second Round of Axial Coding	Third Round Surfacing Possible Categories of Barriers to Socio-economic Opportunities in Africa
1	Software, hardware, technological infrastructure, sophisticated IT mobile cellular telephony	Technology Related	Myriad of attributes related to Information and Communication Technologies (**ICTs**)
	Who owns what information?	Information Management Issues	
	Trained IT workforce, IT human capital	Human Factor in IT Deployment	
2	Local and foreign investment, network economy, cost of accessing internet	Financial Status	**Economic** Status of Member States
	Knowledge economy, information economy,	Economic Impacts	
	Supply and Demand, e-Commerce, e-Business	Market Force	
3	Lack of peace, unstable government, government structure	Political Phenomena	**Political** context
	Developed legal system to facilitate effective regulatory policies	Legal System	
	Lack of establishing and setting up appropriate policies to identify research areas	Policy	
4	Education level of citizens, gender inequalities (eg. Women account for just 4% of ICTs users in the Arab world)	Social Issues	**Social** Environment in Nations deploying e-Government
	Food, drinking water, shelter	Basic Needs of Citizens	

Source: All the findings in the above table are resulted from the secondary data analysis of literature covered in references 12 – 23.

So far, our secondary data analysis has identified four possible broad categories of barriers to socio-economic opportunities in Africa, which are as follows: political context of member states, social environment in nations running e-Government activities, myriad of attributes related to information and communication technologies (ICTs), and economic status of member states.

3. FUTURE RESEARCH AND APPLICATIONS

As mentioned earlier, the research also aims to capture inter-relationships among various codes identified in the first round of coding. The set of inter-relationships will be incorporated with the above mentioned key categories which are surfaced in the third round. As a result of this research, a new model including key categories of barriers to socio-economic opportunities in Africa along with inter-relationships among them will be proposed. The resultant model is expected to inform polices and strategies for strengthening e-Government movement, a *gateway* to offer better socio-economic opportunities in Africa. This model of *barriers to socio-economic opportunities in Africa* could serve as a rich and quick reference for decision-makers in private and public sector organizations as well as policymakers while making decisions about design, development and execution of e-Government initiatives in Africa.

4. REFERENCES

[1] United Nations Division for Public Economics and Public Administration & American Society for Public Administration (2001). Benchmarking E-government: A Global Perspective: Assessing the Progress of the UN Member States.

[2] UN Department of Economic and Social Affairs (UNDESA) and the Civic Resource Group (CRG) (2003). UN Global E-government Survey. Retrieved June 19, 2008, from unpan1.un.org/intradoc/groups/public/documents/**UN**/UNPAN028607.pdf

[3] United Nation Department of Economic and Social Affairs Division for Public Administration and Development Management (2004).Global e-Government Readiness Report 2004: Towards Access for Opportunity.

[4] United Nation Department of Economic and Social Affairs Division for Public Administration and Development Management (2005).Global e-Government Readiness Report 2005: From E-Government to E-Inclusion**.**

[5] United Nations Department of Economic and Social Affairs Division for Public Administration and Development

Management (2006). E-Participation and E-Government: Understanding the Present and Creating the Future.

[6] United Nations Department of Economic and Social Affairs Division for Public Administration and Development Management (2008).UN e-Government Survey 2008: From e-Government to Connected Governance.

[7] Potnis, D. & Pardo, T.(2008). A work in progress: The United Nations eGRI, 2008 Digital Government Conference, Montreal, Canada.

[8] Curtin, G.(2007). *Encyclopedia of Political Communications*. Thousand Oaks, CA: Sage Publications.

[9] Heeks, R. (2006). Understanding and measuring eGovernment: International benchmarking studies. Paper prepared for UNDESA workshop, E-Participation and E-Government: Understanding the Present and Creating the Future (Budapest, Hungary, 27-28 July 2006). Retrieved September 1-10, 2008, from http://www.ansa-africa.net/uploads/documents/publications/eGovernment_benchmarking_2006.pdf.

[10] Heeks, R. (2002). iGovernment Working Paper Series: eGovernment in Africa: Promise and Practice Institute for Development Policy and Management.

[11] Ridley, G. (2008). e_Government: making sense of fragmentation and contradiction. E-gov pre-ECIS Workshop, Galway Ireland. (Unpublished).

[12] Molla, A., (2000). Downloading or Uploading? The information economy and Africa's current status", *Information Technology for Development*. 9, 205-221

[13] Frohmann, B.,(2007). Assembling an African Information Ethics. *International Review of Information Ethics*.7, 1-11

[14] International Food and Policy Research Institute (2000). Bridging the Digital Divide. (unpublished)

[15] Stambach, A., & Malekela, G.(2006). Education, technology, and the 'new' knowledge economy: views from Bongoland. *Globalization, Societies and Education*. 4(3), 321-336

[16] Weber, S., & Bussell, J.(2005).Will Information Technology Reshape the North-South Asymmetry of Power in the Global Political Economy*? Studies in Comparative International Development*, 40(2),62-84.

[17] Britz,J., Lor,p., Coetzee, I., & Bester, B.(2005). Africa as a knowledge society: A reality check. *The International Information & Library Review*, 38(1), 25-40

[18] Heeks, R. (2002). Information Systems and Developing Countries: Failure, Success, and Local Improvisations, *The Information Society,* v. 18.

[19] Huyer, S. (2002).ICTs, Globalization and Poverty Reduction: Gender Dimensions of the Knowledge Society, IDRC Publications.

[20] Chikonzo, A.(2006). The potential of information and communication technologies in collecting, preserving and disseminating indigenous knowledge in Africa. *The International Information & Library Review*, 38, 132–138

[21] Lor, J., & Britz, J.(2007).Is a knowledge society possible without freedom of access to information? *Journal of Information Science*, 33, 387

[22] Kabamba, J.(2008). Globalization a disservice to human development in Africa: the impact of ICT, Central University of Technology, Free State, South Africa, unpublished.

[23] Voutier, R.(2005). Leading Africa into the knowledge society Speech to Knowledge Management Africa 2005, Johannesburg, South Africa., unpublished.