

# E-Government in Sudan: Challenges and Future Prospects

Dr. Mozamel M. Saeed

Associate Professor

Department of Computer Science

Collage of Science Prince Sattam Bin Abdul-Aziz University

KSA

## ABSTRACT

The subject of E-government is one of the most important topics in public administration. The latest developments in information and communication technologies (ICTs), have empathized the need to rely on these technologies in the work of the government.

This paper seeks to review the main challenges facing the implementation of E-government in Sudan, These challenges represent as an obstacle to access to good governance that can satisfy the sustainable development goals, and meet the needs of citizens and supports the march of development and evolution.

So the paper has stated those constraints and challenges facing the implementation of E-government in Sudan and provided some suggestions to deal with it. Considering the development and future changes to post electronic government.

**Keyword:-** E-Government, E-Government challenges, Sudan, Future prospects, Good governance.

## I. INTRODUCTION

The world today has witnessed radical and different social, political and economic aspects. This is due to man' s ability to invent information technologies, which has raised him to the highest levels of scientific civilization. It is called the age of (information and communication revolution era). Whereas information and communication technologies constitute a major driving force for shaping the current era.

Undoubtedly, this accumulated technological revolution with its geometric acceleration has caused societal shifts in the lives of individuals, business organizations and government alike, which has created some terminologies to express those shifts in government concepts, its structures and working methods in line with international developments through the use of technical systems and the development of service management.

The technology obtained and possessed by the states became synonymous with the renaissance or backwardness of those states. The introduction of information technology in all government business is the goal of many States, seeking to advance and improve government performance. and developing transparency and speed in front of governmental goals with citizen (client) on the top of the priorities of State service and hardware reflecting the meaning of Justice in dealing with all classes of society by providing equal services in record time and effort , cost and limited time to achieve the speed of delivery and citizen satisfaction.

The eyes of the world today tends to shift towards E-government application, because it has become a global approach, and all countries are seeking to follow it. Through following and adopting ICT in executing various actions in line with the general context of international and regional framework.

## II. DEFINITION OF E-GOVERNMENT

E-government refers to the uses of information and communication technology, such as communications and foreign networks, websites, computer systems by government agencies. E-Government also affects the fundamental relationship between government agencies and citizens and their businesses on other side as follows:

1. E-Government is to reinvent the business and governmental actions by new ways to integrate information and access it via a website and participate in the procurement process and service performance.
2. It is also considered as a "general affairs management transformation process" by influencing the relationship between state and individual responsibility.

The E-government is not the solution to the failed development efforts and rampant bureaucracy, red tape and non-democratic government. It is in fact, hastening the need to address the same limited scale and barriers, such as poor education systems, rise of telecom prices, untrusted

communications networks, and weak investment, particularly for the small and medium-sized economic activities.

The E-government also impose new requirements and challenges related to intellectual property agreements, privacy, security, information systems, and competition with internet services companies.

### **III. THE IMPACTS OF E-GOVERNMENT**

The first impact: **It creates a shift in governmental actions**, for example (the provision of government services becomes faster and at a lower cost). Those gains are due to reorganizing the internal management procedures, incorporating and integrating information to government agencies. From this perspective, the citizen will definitely benefit as a client. The E-government can also serve the business of those who will turn as clients of government services and suppliers of goods and services to the government.

It can also serve the government itself through reducing cost and expenses.

The second impact: **The E-government develops a system of governance and public affairs** (Governance)-and create a new relationship between citizens and the state in the management of state affairs through the three following components:

- a) The collection of information as a basis for policy development, and disseminate it to the citizens.
- b) The use of electronic information systems to facilitate participation and dialogue process for the development of policies, priorities and strategic directions of the state.
- c) In an advanced stage, the use of electronic information systems in the election process and political representation.

However, the application of these components requires political will and genuine commitment, by using the electronic information systems in order to promote governance and public affairs management system.

Although the two impacts mentioned previously, were apart in concept, but they seemed dependent on each other. The nature of governance affairs determine expectations about how to manage the state of governance, and the new ways for managing government action could blow interactively and prompting a new governance and management of state affairs.

### **IV. DIMENSIONS OF E- GOVERNMENT**

E-Government has three dimensions: from government to government (G2G) which represents the secure exchange of information and transactions between different government departments, this requires linking all government departments with each other in a common network and consolidate government resources in order to improve and develop procedures and increase productivity.

And from government to business (G2B). This aspect is concerned with the provision of government services for the economic and business enterprises and investors, by applying means that can reduce the costs and contribute to increasing their profits. The private sector occupies a large space and attention from government agencies for being a recipient of government services.

So for this, we find that future scenario for E-services, places businesses at second rank in terms of the possibility of providing the necessary electronic services, from government to citizen (G2C). It is considered as a maturity stage, in utilizing electronic transactions, it's also the stage in which large gains are achieved at the national level. It allows service to go to beneficiary rather than he goes by himself to obtain it. , It reflects the ability of citizens and residents to complete the administrative formalities and services provided by government institutes, without going to the governmental sites, that require electronic mechanism to ensure citizen service without direct governmental organizations spatial connection creating actions that enable him to accomplish all his dealings with this perspective easily.

### **V. ELECTRONIC GOVERNMENT IS AN ECONOMIC NECESSITY**

E-Government option is a strategic choice in line with the civilized world in terrible economic variables developed society in various aspects of life, especially in the economic field that is based on knowledge and known as "knowledge economy" it is a sophisticated economic pattern based on the widespread use of computers and the Internet in various aspects of economic activity based on knowledge, innovation and technological development.

This reality imposes on all governments to keep abreast of developments, to attract global business and compete in a rapidly changing world, moreover, reducing the costs and expenses for the governments and citizens alike through facilitating the performance of the various services needed by individuals and investors which contributes to a proper investment climate and raise the efficiency of government

performance and instructs government expenditure under the framework of transparency. From this perspective the state came to care and be attentive about the concept of electronic government. And became convinced about its crucial role in boosting the national economy and improving people's pension and creating alternatives for a better life.

## **VI. SUDAN AND ITS BREAKTHROUGH TOWARD ELECTRONIC GOVERNMENT**

The government becomes electronic when public sector operations and transactions are of digital nature regarding business or audience. However, the E-government will include the general services and administration and caring about education, health, social affairs, and others.

With confident and planned steps Sudan has moved towards the construction and development of hard and soft infrastructure for E-government applications and technologies, benefiting from the predecessor states' experiences in this regard. So Sudan has made great strides in this area in accordance with the technical state strategies through a set of operational and applied stages of the concept of electronic government, initiated a series of actions led by preparatory and most notably draw clear policies and plans on modernizing the state administrations and its all departments. And the overall computing entry on all works and various activities, and then prepare a circular decrees and applied laws and decisions that are supposed to precede the start of E-government applications. And preparing those which will organize these applications at a later stage, it is in constant development and improvement processes according to the requirement and need of the stage.

## **VII. CHALLENGES FACING IMPLEMENTATION OF E-GOVERNMENT IN SUDAN**

Many challenges facing Sudan in applying electronic government are as follows:

1. Weak communications network infrastructure and inability to cover all users, regions and provinces with the same efficiency.
2. Low level of Internet use: due to the high cost of access to internet services.
3. Loss of citizen information privacy and fear of leaking information that he does not wish to share with others.
4. Weak legal legislation that facilitate dealing with electronic applications in General.

5. Lack of awareness of social and cultural concepts and applications of E-government and information society attributes not available.
6. Lack of qualified human elements in dealing with electronic applications.
7. Lack of confidence in electronic transactions.
8. Hard to believe the government department's electronic acts perform, due to the old work favorite habits adopted by those influencers in decision- making.
9. The slow progress of E-government projects.
10. Weakness of the change process.
11. Inability to meet the expectations of promises and actual needs of citizens.

## **VIII. MECHANISMS AND PROPOSED METHODS FOR SOLUTION**

There are many mechanisms and proposed methods to meet the challenges of E-government:

- 1) The importance of speed in the official announcement of the political leadership of Sudan toward E-government applications and the strategic and implementation plans.
- 2) Work on the establishment of an independent body under the guidance of E-government applications in Sudan, and to unify and coordinate efforts.
- 3) Develop communication infrastructure to be ready to support E-commerce and provide data transmission speed and capacity required, create the necessary organization for the adoption of electronic transactions and contracts.
- 4) Work on preparing qualified national human resources to play an active role in the success of E-government applications.
- 5) Set up enlightenment and training programmes for the community in general in an orderly and understandable and clear to transform society to an information society that will have the ability to deal with ICT easily.
- 6) Review some general and higher education, and work to create a new curricula that is suited to ICT.
- 7) Speed at ending legislation and laws concerning electronic financial transactions and security breaches.
- 8) Start the restructuring of government organs and streamline delivery of services in accordance with clear and understandable mechanism and consolidate similar activities by more than one government agency.
- 9) Activate the role of universities and specialized institutes in formulating policies and implementing appropriate programmes for E-government applications, particularly the institute of public administration and training

for being concerned about the training and qualification of state officials.

10) Allocate adequate financial budgets for these applications on long periods, indicating funding sources and expenditure accurately taking into account the rapid development of digital technology.

11) Give sufficient space for the private sector to encourage investment in the field of information technology and creating the appropriate climate for the growth of such industries and the development of legislation and regulations, inducing investment and providing the infrastructure that is capable to accommodate these huge projects.

12) Continue to work on reducing the cost of connecting to the internet to promote electronic transactions and support the trend towards creating the information society.

## **IX. POST E-GOVERNMENT STAGE**

This stage requires policy makers, planners and decision makers in the Sudanese state to be at a high level of awareness that this stage requires overriding strategy and creating a broader electronic services, building the information society, and changing the philosophy of government, change the work culture to a high degree of professionalism and support citizen participation, as well as a shift to see farther in public sector development and creation of good governance.

To understand the role of the post stage of the (E-government) , is essential for the leaders and public sector managers, not for focusing only on the process of transforming government services electronically, but in order to understand the importance of the role being played by the government in achieving the "governance" when it goes beyond the concept of electronic services and technologies in the work of the government to the development process in tools and methods, culture and relationship with the citizen.

Here is the degree of similarity between what the electronic government desire, and what was achieved through good governance, where as there is an agreement between E-government and good governance to access multiple items that can increase the efficiency of the public sector, notably supporting citizen participation, improving public sector performance, transparency and attention to accountability.

It can be said that the aspirations of the E-government is in fact a support for rational management directions, and that won't happen until E-government aims to transcend the technical interest and achieve change in electronic service delivery methods through electronic media to a particular stage that is further from these goals, so as to understand that the post stage of E-government is a determination toward developing the government, and supporting the goals and

expectations of good governance in all processes , activities and public services efficiently and effectively.

## **X. CONCLUSION**

The application of E-government in Sudan played an effective role in achieving sustainable development and addressing global challenges in the economics of knowledge. And this is evidenced from the benefits that the E-government can offer or become aspired. It is similar with the elements of good governance to enhance the relationship between the development of E-government building, until achieving the desired goals, objectives and aspirations.

So, the E-government is ranging through technical and building support, for change to a big stage that can move the public sector from focusing on electronic services to objectives of higher values in order to raise the level of performance of the public sector in all its aspects and management of financial, human, technical, legal and development community development is reflected the stage after the biggest public sector moves from focusing on electronic services of higher values objectives is to raise the level of performance of the public sector in all its aspects, management , financial, human , technical and legal, reflecting on community development, and success in achieving objectives, with regard to this aspect, depends on political will , genuine commitment, and constant attention to implementing E-government projects.

## **REFERENCES**

- [1] A.K. Singh, R. Sahu, Integrating Internet, telephones, and call centers for delivering better quality e-governance to all citizens, *Government Information Quarterly*, 2010.
- [2] A. M.Haj, Information communications technology and local development, *Telematics and Informatics*, 2013.
- [3] B. Axford, R. Huggins, Towards a political sociology of the Internet and local governance, *Telematics and Informatics*, 2003, pp. 185–192.
- [4] J.C. Bertot, Public access technologies in public libraries: Impacts and implications, *Information Technology & Libraries*, 2009, pp. 84–95.
- [5] J.C. Bertot, P.T. Jaeger, The e-government paradox: Better customer service doesn't necessarily cost less, *Government Information Quarterly*, 2008, pp. 149–154.
- [6] K. Barzilai-Nahon, Gaps and bits: Conceptualizing measurements for digital divide/s, *The Information Society*, 2006, pp. 269–278.

- [7] National Information Center in Sudan ( [http:// www.: nic.gov.sd.](http://www.nic.gov.sd)), 2016.
- [8] National Plan for Communication and Information, Ministry of Communications and Information Technology in Sudan (<http://www.mcit.gov.sd/>), 2016.
- [9] Ministry of Presidential Affairs in Sudan ([http://www.presidency.gov.sd.](http://www.presidency.gov.sd/)), 2016.
- [10] PSublic Governance; Territorial Development Directorate. "Recommendation of the Council on Digital Government Strategies 2014". OECD. Retrieved 2016-04-10.
- [11] P.T. Jaeger & J.C. Bertot, Designing, implementing, and evaluating user-centered and citizen-centered e-government. International Journal of Electronic Government Research, 2012.
- [12] P.T. Jaeger & M. Matteson, E-government and technology acceptance: The implementation of Section 508 guidelines for e-government websites, Electronic Journal of E-Government, 2009, pp. 87–98.
- [13] S. R. Schwester, Examining the barriers to e-government adoption. El J E-Gov. 2009;7(1):113-122..
- [14] T.B. Anderson, E-government as an anti-corruption strategy, Information Economics and Policy, 2009, pp. 201–210.
- [15] United Nations Department of Economic and Social Affairs. "United Nations E-Government Survey 2014" (PDF). UN. Retrieved, 2014.