

E-Government Contributions and Advantages: A review of Sultanate of Oman

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Abstract- In recent years, Internet and Information Technology growth has been the main driver and catalyst for demand of change in most of the business and service sectors in the world. There from, new technologies and concepts has changed government interaction with business, agencies, organizations and citizens (Lee, 2010; Rokhman, 2011) by establishing new service styles, such as: e-banking, e-commerce, e-voting ...etc. Hence, they will permit new channels of interaction and communication between different government sectors and between government and business organizations. This interaction will lead to improvement in government performance and efficiency while interacting with the main and the most important category of this project which are customers. Specifically, customers in e-government and government point of view are citizens. This paper will furnish and review some contributions and advantages illustrated by different scholars of e-Government that would give better understanding of this technology to be conducted in different nations. A qualitative approach of Oman to discuss citizen's point of view in accepting e-Government adoption and implementation.

Index Terms- e-Government, GOE, G2G, G2C, G2B, G2E, ICT, IT, CAPEX, OPEX, 3Ps

I. INTRODUCTION

Moving towards e-Government would give many advantages to the country style of service along with budget usage and controlling. Indeed, it will give a great enhancement in the operation of the government in many aspects for the betterment of Government Operation Excellence (GOE). Some of these advantages are reducing the cost and increasing the interest due to the reduction of printed paper, acquire files and space for storage. Reducing work load on employees is another benefit to the work environment because employees will be on contact with minimum number of citizens and it will create better and calmer work environment. E-Government will benefit rural areas along with big cities because citizens can apply for services as long as they are part of the country and in some cases and services, citizens may apply and request for a service while they are abroad. Other benefits like environmental, knowledge, etc. could be counted for the betterment of the country (Huang and Bwoma, 2003). However, e-government is having some challenges and disadvantages as well which shouldn't be forgotten or ignored. Some of these disadvantages are illustrated under hyper-surveillance, cost, inaccessibility sense of transparency and accountability. Hyper-surveillance, is affecting the security of data in terms of citizen's personal information and government's

information while the capital cost required for the e-government project will be initially high for establishing the systems and structure but after that the operation cost will be low. On the other hand, usually face to face communication is better in terms of transparency and accountability than other methodologies like e-government. E-government's concept along with its applications contributes significantly towards many parts in the country like: government, society and environment.

1.1 Contribution to the Government

The implementation of e-government is in many forms of management and the urban of governance is leaning towards applications of e-government as transparency and public sector administration and accountability. Many telecommunication tools and platforms serve e-government to illustrate better platform and infrastructure like: emails, internet, WWW and list of servers. In late 1990s, web-based portals and services were counted as integral and significant parts of modern e-government (Ho, 2002). Thus, management and organization of urban management could be called "information business" which led Hepworth (1989) to coin the term "municipal information economy". Some definitions of e-governments are define it as info-kiosks where public and citizens can access public services online and others define it as storing of government agencies where better administration and data storage in electronic format for and of public. Generally, definitions differ with goals and goals of e-government websites differ and diverse as the creation of the government (Jaeger, 2003).

1.2 Contribution to Society

E-government does not give only fast, accurate transaction and better delivery of information and services but it goes beyond that to contain the seeds of an even higher value: better practices and greater health of democracy. Additionally, there are many other benefits of e-government which include more of professional development opportunities furnished through information sharing, online forums and bulletin boards within trade and professional groups. For instance, citizen's ability to have and obtain convenience information about service and private sector service will improve with the interaction with government and due to more recognition and care given by the government to the internet and communication platform in the country, the effect will be targeting the society and citizens for their knowledge and learning process along with the improvement in style of life and better level of education, information seeking and technology acceptance and usage of modern equipment, applications, systems and tools. Pina, Torres & Royo (2007) argued that government recognition in internet provides better access to information and services provided by

government anywhere, anytime and anyone who got the knowledge and equipment (computer, smart phone...etc.).

1.3 Contribution to the Environment

E-government has many benefits to many parts of the country and environment part is not an exception from other social and government benefits. Otenyo & Lind (2004) listed some environment benefits and they are as following:

- Waste management by coordinating collecting data
- Web-based portal would manage and improve access to public information and coordination information. Better recycling management
- New technologies and systems supports recycling and waste management
- Manage pollutant emissions reduced from electronic registering and tracing of vehicles to study their history
- Permit and enable citizens to raise emails and information about environmental problems of neighborhood
- Facilitate proposed tree plantation and projects focus in environmental protection
- Rate of environment aspects and deforestation by citizens and decision makers through e-data storage and data sharing at regional level

Lollar, Xia (2006) argued that web portals design can play a significant role in keeping citizens and public civilization better informed and keep them active to support authorities in maintaining cleaner streets, reduce maintenance and cleaning cost, increase recycling and recycling options and reduce complains. Normal and few targeted information about the recycling areas, points methodologies, benefits, communities environmentally safe and, the most important, the way to meet national environmental sustainability targets and laws could be posted on portals (Al-Zahrani, 2011).

II. E-GOVERNMENT ADVANTAGES

Many advantages suggested by scholars that are associated with e-government and the establishment of it such as: citizens access, citizens participations, service integration and facilitation of general compliance. Recent studies furnished that: interactive websites and portals published by government would encourage citizens to participate in decision-making which will increase citizen's satisfaction and trust in government and the accountability level in government agencies (Johnson 2007). Torres, Pina and Acerete (2005) argued that considering technology as a way to reduce cost and increase efficiency only is a wrong consideration path. Since, it is a remarkable and efficient way of facilitating a communication and discussion platform with clients to respond to their needs. Hence, government's offered and delivered services through e-channels are termed e-government. Moreover, e-government conducted and initiated by most of the countries around the world took into their consideration and concentrate in services and delivery of information to citizens and businesses. However, these services through e-channels are not supposed to replace traditional methods but it should assist and supplement it (Al-Zahrani,

2012). Bertot, Jaeger and Grimes (2010) indicated different advantages of ICTs and the services attached to it like e-government like

- reducing corruption
- promoting good governance
- strengthening the reform-oriented initiatives
- reducing potential for different corrupt behaviors
- enhancing government-citizens relationships and government-employees relationship
- allowing citizen to track their activities and service
- monitoring and controlling government employees behaviors

The main idea of e-government is to define the usage of available information and communication technology infrastructure in order to transform government services from traditional way to more accessible, effective and accountable service way. Ultimately, the main aim of e-government is to offer both citizens and businesses an access to government and public services with all promised and indicated advantages (Torres, Pina and Acerete 2005). On the other hand, there are many studies conclude that citizens may play an important role in decision making process by being engaged and have access to more information and surveys conducted by government which will develop a stronger relationship and trust between both sides (Al-Zahrani, 2012)

2.1 Opportunities of E-government

Grant and Chau (2005) stated from open approach viewpoint that most of the governments from different levels and prospective are confronting money and budget related plan, demand and responsibilities even in the middle of monetary emergency. Evidence to that is the examination conducted and directed by UNESCO (2004) which demonstrated that ICTs can play as catalyst to re-invent government by infusing some inventive thoughts in important aspects like legislature foundation and structures to upgrade parts like procurement of products and administration with more focus in stupendous viability, productivity and easier expenses (Grant and Chau, 2005). Therefrom, it can be observed that e-government has many advantages in many aspects and sides of the local and global aspects. For instance, Wescott (2001) illustrated that the facilitation of more convenient government services will lead to have More efficient and cost-effective government, allow information access to greater public and increase the accountability of government to citizens and Seongcheol, Hyun and Heejin, (2008) argued that in order to improve transparency and to combat corruption in government sector, E-government is increasingly being used. Information and communication technologies (ICTs) are discussed and agreed by many as a cost-effective and convenient solution to reduce corruption and promote openness and transparency (John, Paul and Justin, 2010) while "*E-government has the potential to reduce the cost of service delivery, although the front-end costs of development may mean that cost savings are not immediately realized*" (Caroline and Karen, 2006, p1). Some main advantages illustrated by different scholars are further discussed below:

2.2 Equal Access to Public Information

West (2004) argued that e-government utilization would affect the access to open data negatively and conceivably expand provincial and reconciliation world widely. Case in point, Anderson (2006) contended that government employments promotion on website, portal and internet would upgrade individual's capacity specifically for individuals who have no administration association. Ashcroft, Griffiths and Tiffin (1998) contended a similar concept which is that e-benefits just befit the well-to-do mark that have engineering admittance and utilization aptitude higher than and more gainfully than their less individual natives.

Al Shihi (2005) stated that in order to counter the equivalent availability contention, all government sectors especially the sectors that specified and made for creating nations, are giving data stands, services and vouchers to other natives that don't have their own private machines to get into the internet. Melitski and Holzer (2007) concluded that E-government transparency can possibly oversee and scatter generally open data. An apparatus like e-government should be utilized in order to improve transparency and responsibility in the open administration conveyance (Grant and Chau, 2005). Considering all above mentioned targets, Misuraca (2007) illustrated that a strong two-route correspondences between different parts like business, natives, non-governmental association and government offices is required (Meso, Datta and Mbarika, 2006). Misuraca (2007) further noted that having only spot advanced workstations and government sites in government business locals is not enough and it requires also resident association. Furthermore, disappointment in fail to improve such intuitiveness would act as sustain the customary correspondence model which has various levels, vertical and disinclined to compelling dialog (Grant and Chau, 2005). Transparency and new accountability forms have been highlighted as good governance key elements. Searching for new governance styles that promote for higher transparency levels along with the citizens engagement is illustrated as a way of improving citizens' trust in governments and from it the government-citizens relationship (Bonsón et.al, 2012). Moreover, Hassan and Fatimah (2014) empowering the employees of public and governmental sectors through practicing e-government service style would work like catalyst that creates trustworthy behaviors among employees. This behavior would be beneficial in promoting transparency, effectiveness, efficiency and innovativeness.

As per Reddick (2004), with the absence of a two-way correspondence framework, countries and nations may consider the fact that they posted dissention o communicated some worry online and legislature authorities may react fundamentally according to it. Regardless, whatever the claim reaction from countries and nations about their data, reaction or protestation and the way issues and aspects are handled, there will be less averse to trust government and partake all in broad daylight arrangement procedure (Grant and Chau, 2005).

2.3 Lower Costs

Jensen (2007) mentioned that politically, especially among traditionalists, the governments' using is generally not well known. Thus, the progress of legislatures are usually a planning approaches to control and chop down open uses as the income contracting is in progress and keep on. Moreover, Clinton

organization gave a guarantee to redesign government businesses guarantee to reflect hones specifically in the private area where benefits, gainfulness, results and effectiveness are the main impetuses (Jensen 2007).

Reece (2006) illustrated that the small percentage of administrations in terms of creating nations are propelling activities in e-government and the reason behind that is nation's prospective change and the impact form unique hobbies by global giver group (Grant and Chau, 2005).

Santos and Heeks (2003) illustrated that the utilization of administration, substance and data framework engineering would simplify and reduce the cost of redesigning open data and also offering data crosswise over organizations and parts. Furthermore, they declared that engineering is utilized by legislature in order to guarantee open approaches are suitable to introduce intercession at lower and better costs.

2.4 Efficiency and Effectiveness

ICTs utilization would build productivity and viability drastically in the open data and administration approach. Additionally, online administration's procurement would decrease the organization's paperwork lessons and spare time because administration could form in anyplace and anywhere. Standalone automatic systems can kill or at least eliminate the administration slips danger (Silcock, 2001). Such product features and capabilities will definitely permit governments to lessen excess positions and lookout for motivating factors and forces for citizens and public to utilize online administration. Rwanda for instance had its e-government empowered in excess of 95% of the total populace to utilize web to get national personality card (Silcock, 2001).

Two main features should be available in the administration methodology of every system which are transparent and powerful (Anderson, 2006). Silcock (2001) outstanding that citizens would have the chance to partake, participate and consider chose authorities with their decisions and responsible for issues and expansive strategy activities.

2.5 Reduce Corrupt Practices

Hassan and Fatimah (2014) Good governance would act like a strong and solid foundation for the reforming of organization especially through aspects like: cultural, intellectual and technological interactions among existing employees. The good governance principles drive existing employees to be better in effectiveness and transparent while providing a high services quality. Additionally, it protects them from being involved in different and various corruption behaviors. Moreover, the government services quality can easily be improved with more personalized services through the information communication technology (ICT) usage (Hassan and Fatimah, 2014).

The World Bank observed that defilement is an emergency that is unfavorable to social, monetary and political development of creating nations Thus, Tat-Kei Ho (2002) noted that degenerate practices are considered among the biggest difficulties confronting political administration in the development of majority of systems rules. Furthermore, it is a standard practice in most of the creating nations for common servants to expect a payoff or even a kick once again for each

administration aspect that they give and provide (Tat-Kei Ho, 2002).

The disappointment and fail to handle an affection in human rights in any case can lead to unnecessary and avoidable postponement or at least to out foreswearing of the asked from administration. Therefore, regulations and guidelines can be improved thoroughly by ICTs technology usage because the computerization and automated system technologies and their capacity to impart data can help to expand transparency (Tat-Kei Ho, 2002). Anderson (2006) commented in this as, online administration dispense with the sector, department or organization as well as eliminate and kill of particular touch and reason that could lead and include inclination or defilement and on the other hand would empower and improve the administration's reactions and decisions (Tat-Kei Ho, 2002).

2.6 Political Participation and Democratic Governance

Political science and open organization aspect are considered one of the most significant subjects and aspect in this field. Since, political cooperation is considered as the national engagement in route to the level and point where it impacts open approaches (Kenny, 2003). An articulation in voting to support such decision being processed to occupy the verbal confrontations approach, fighting, congress affirming, political gathering enrollment, support the raise of political battle and consider the responsibilities of organization. Natives guarantee that the vote precepts are influencing and it will describe government responsibilities, law principles, and transparency, free of races and have supported open approach procedures (Kenny, 2003).

Most of arrangement procedures conducted by specialists and scholars agreed the e-government have the capacity and capability to move beyond the administration cooperation to upgrade political cooperation as well. Kenny (2003) gave an example to that by illustrating that the utilization of legislature of internet can enhance its exercises, plan and arrangement and can also decrease the reliance on media that are divided and falsehood from the initial and primarily government's resistance as a change resistance which will improve and increase political mileage. Furthermore, all modern styles and communication methodologies in Ngos, political activities and common pop culture needs solid data to broadcast and spread their messages, reasons development and initiate supporters. Hence, for whom are willing to be confined through political abuse from getting such data, internet would be the optimum way to recover their entitlement to open data (Kenny, 2003). In order to guarantee reasonable, free and continuous decision, the project of e-government can improve and enhance the control of voter's enrollment, decisions and fortify party regulations. Consequently, the insurance from electronic framework which is known as e-election process is that it will avoid the voting result's control at the survey point of view and focus but this independent and standalone electronic framework can't provide assurance for high velocity and precision (Bailard, 2009).

Elements like trustworthiness of the managers and the product limitations required in order to make preparation for hacking, ambush or information about the focus degree of the uprightness of race. Additionally Bailard (2009) commented that the relationship among free stream of data, stable gathering

information and fair influence is positive. Hence, ICTs utilization to register and enlist party parts would enhance and improve the widening the base of gathering. Furthermore, the capacity and power would be in citizens and residences hand to catch up strategy motivation and political crusades in order to ensure that - as imagined - all advantages like balanced government and outflow flexibility are generated from the multiparty system (Bailard, 2009).

2.7 Promotion of Public-Private Partnerships

Public Private Partnership or as known as the 3Ps (PPP) is involving the vital and exertion organizations between private areas and general population. As principle in execution of significant and important activities of such organizations on terms of aptitudes, different assets and expenses would be powered (Bailard, 2009). World Bank Report indicated that the assets and ability of the private part are influenced by administration for instance, activities like giving requisitions fittings and programming, quacking and improving network, executing benchmarked aptitudes, appraisals, abilities and certificate (Bailard, 2009).

PPP is an instrument that gives reciprocal assets in order to dodge unnecessary redundancies especially when confronting challenges plan by governments. Legislature is an essential motor that in improving and empower the budgetary assets in business and private segment. It can be empowered by systems, cooperation and organizations (Kaaya, 2003). Essentially, Centre for Technology in Government (CTG) illustrated that government's prosperity to enhance and improve administration conveyance through its utilization fundamentally depends on cooperation among diverse government's offices, Ngos and private parts (Kaaya, 2003). Evidence to that is that CTG proposal to have incorporation of government offices' work method, exertions and data streams in order to improve and enhance the viability and productivity. Kaaya (2003) look at today's difficulties and obstacles as they are so tremendous and they force administrations in different organizations and governments to work as single association and avoid acting alone.

III. RESEARCH METHODOLOGY

In order to check citizen's point of view in adopting e-Government approach in Sultanate of Oman, a qualitative approach was conducted through several meetings. Researcher took interviews with 9 persons upon to their position, interaction with electronic services and knowledge. Some of them work in governmental sectors while others are in private or personal businesses. Table 1 below shows the response when asked about the advantages and the actual reflect in the current situation of e-Government in Oman.

	Yes	No
Opportunity	7 (78%)	2 (22%)
Equal Access	6 (66%)	3 (33%)
Cost reduction	6 (66%)	3 (33%)
Efficiency	3 (33%)	6 (66%)
Anti-corrupt	4 (44.5%)	5 (55.5%)

politics	4 (44.5%)	5 (55.5%)
PPP	2 (22%)	7 (78%)

Table 1: advantages vs current e-Government status

IV. DISCUSSION

As per the first question which was about the opportunity the citizens will have in the current e-Government status in Oman, most of the answers were positive mostly due to the neighbor country status (UAE) and they see that the goal is achievable. However, some negative answers were received and it was mainly due to the lack of the efficiency.

“Equal Access advantage is one of the most hoped goal” one of the answers received. Majority of the answers was positive due to technical and behavioral acceptance to have such advantage. On the other hand, some answers were negative with a correlation of corruption and politics where they think that equal access will not be achieved totally.

Although most of the answers of cost reduction was positive but some of them differentiate about capital expenditure (CAPEX) and Operational Expenditure (OPEX). Their comment was that OPEX will be reduced but CAPEX will be high, indeed, this comment is valid due to the huge capital required for completing e-Government project.

Anti-Corruption and Politics answers shows almost similar and equal percentages and that is because some interviewees gave comments that e-Government has no effect in these aspects in Oman while others thought that it will enhance these aspects.

3Ps question had a bad overview with majority of answers with negative feedback and with strong comments with bad promotions in all aspects of the project. Figure 1 below show interviews output reflected from Table 1.

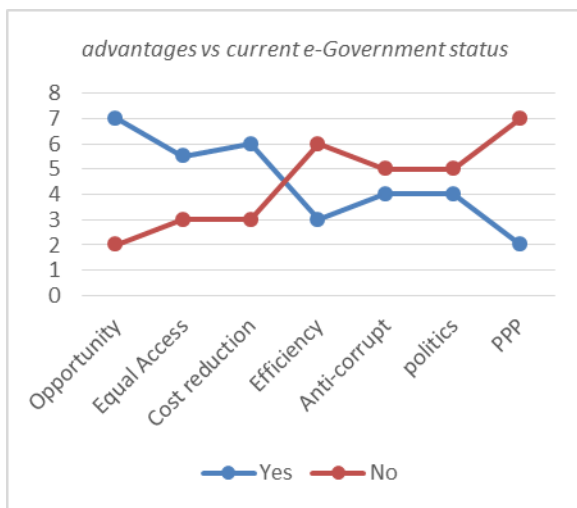


Figure 1: advantages vs current e-Government status

V. CONCLUSIONS

E-Government has many advantages that would enhance the lifestyle of nation, citizens and service quality if it is well organized and implemented correctly. This implementation is

varied from nation to another due to many aspects with regards to technology, behavior and culture. Hence, Sultanate of Oman approach should take in consideration local and neighbor situations for enhancing the project’s approach and to boost up the process. Aspects like 3Ps and efficiency of the project currently and expectation of future is damaged in local’s minds which effects their trust towards their government which effects citizens-government relationship.

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