

## ***Digital Government and the Change Management Challenges FIELD STUDY***

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### **INTRODUCTION :**

The e-government or digital government will play a key role in shaping the traditional governmental institutions. The impact of the digital government on the Egyptian governmental institutions has not been critically studied.

It was reported on the Egyptian Information society, 13<sup>th</sup> of September 1999, that the former president of Egypt Hosni Mubarak said that the main aim of the information technology is to improve the living standard of all Egyptians. No further progress was made following his statement and it left Egypt further than ever from implementing the e-government.

Mubarak has repeatedly warned that Egypt's rapid population growth is putting pressure on the country's economy. Moreover; the explosive population growth in Egypt has led to a huge influx of people to join the governmental administration body and it has

resulted in 7 million persons were employed in the civil service and parastatal of the productive and service sectors.

The dramatic shift from the planned to the liberal economy was faster than the essential changes in the work culture of the Egyptians who found themselves unready to grab suitable opportunities in neither the flourishing private sector nor the entrepreneurial environment.

Although a lot of studies looked into the area of implementing the e-government from the prospect of being a change management process. Yet in Egypt the question is more complicated that the change is not limited to the internal procedure within the governmental bodies but it extends to questioning the social reaction toward the ICT plans in a country accommodates a huge bureaucratic regime by any mean or measure. The resistance will make a lobbying within the governmental employees who will find themselves overload the government which usually claim that it could work better without a big percentage of them, masses who are the end beneficiaries in many cases became aware about the impact of the implementation of e-government on increasing the unemployment rate mainly among the educated youth.

Egyptian government embracing another point of view that the previous communication minister Ahmed Darwish bluntly

considered the e-government as a part of the good governance which in turn represent a “pre-requisite to attracting investment which is a main element for high growth rate that is needed to create jobs and support the social programs.”<sup>i</sup>

Darwish definitethe e-government as using use of Information and Communication Technologies (ICT) to support good governance and saw it moving beyond the traditional trend of 'IT in government' models to access information and services interactively. It allows the interactive participation in the decision making process. Emerging information and communication technologies made a significant contribution to the achievement of good governance.

However, the hypotheses adopted by the minister at that time could not be questioned after eight years because of the political and socioeconomic Vicissitudes driven by tow waves of revolutions and social rebellions in 2011 and 2013. This does not mean that the e-government did not go further over the last decade, it still an ambition of the Egyptian state and remarkable milestones already passed.

#### EGYPTIAN E-GOVERNMENT STATUS

As per the UNITED NATIONS E-GOVERNMENT SURVEY 2014 Egypt was one of six African countries with EGDI<sup>ii</sup> E - Government Development Index above the world average of

0.4712 placing it among the top 50 per cent of the world. This survey stated that Tunisia and Mauritius are the two highest-ranked countries in Africa, with Egypt, Seychelles, Morocco and South Africa following closely behind and showing progress as compared with the 2012 Survey.

In most recent survey which was conducted in 2016, statistic figures show that Egypt did not witness any satisfactory advancement and it was among three countries (with Antigua and Barbuda and Fiji) dropped from high-EGDI to medium-EGDI, and it ranked 108 over the world.

Furthermore, the survey continues to show that Egypt is considered within the middle group on E-participation Index (where OSI - Online Service Index ranges from 0.25 to 0.5). While the TII situation shows that Egypt still has to make great efforts to extend its capabilities to build an efficient infrastructure to match its goals on the level of advancing the e-government project that the percentage of persons who can use internet in Egypt still represents 31.7% (to make useful comparison this percentage in some countries within the Middle East and North Africa region: Jordan 44%, Tunisia 46.16%, Morocco 56.8%, Turkey 51.04%, Iran 39.35% and Israel 71.45%).

Telecommunication Infrastructure Index (TII) and its components

Country	TII	Percentage of Individuals using the Internet	Fixed-telephone subscriptions per 100 inhabitants	Mobile-cellular telephone subscriptions per 100 inhabitants	Fixed (wired)-broadband subscriptions per 100 inhabitants	Wireless broadband subscriptions per 100 inhabitants
Egypt	0.3025	31.70	7.57	114.31	3.68	31.10

By these conditions Egypt placed seventh in Africa as per the following table<sup>iii</sup>:

Egypt launched the e-government portal (<https://www.egypt.gov.eg>) on 2015 manifests the ambition to enhance the governmental services to the potential users who are divided into the following major categories<sup>iv</sup>:

Top 10 countries for e-government in Africa

Country	Region	Sub-Region	OSI	HCI	TII	EGDI	EGDI Level	2016 Rank
Mauritius	Africa	Eastern Africa	0.7029	0.7067	0.4596	0.6231	High	58
Tunisia	Africa	Northern Africa	0.7174	0.6397	0.3476	0.5682	High	72
South Africa	Africa	Southern Africa	0.5580	0.7253	0.3807	0.5546	High	76
Morocco	Africa	Northern Africa	0.7391	0.4737	0.3429	0.5186	High	85
Seychelles	Africa	Eastern Africa	0.4058	0.6861	0.4624	0.5181	High	86
Cape Verde	Africa	West Africa	0.4565	0.6031	0.3629	0.4742	Medium	103
Egypt	Africa	Northern Africa	0.4710	0.6048	0.3025	0.4594	Medium	108
Botswana	Africa	Southern Africa	0.2826	0.6553	0.4215	0.4531	Medium	113
Libyan Arab Jamahiriya	Africa	Northern Africa	0.1087	0.7588	0.4291	0.4322	Medium	118
Kenya	Africa	Eastern Africa	0.5580	0.5169	0.1808	0.4186	Medium	119

Service Area	Services	Service Area	Services
Business Services	<ul style="list-style-type: none"> <li>• Certificate Of Competency – COC</li> <li>• Medical Examination Result</li> <li>• Ancillary certificates inquiry</li> <li>• Enquiries Individuals certificate</li> <li>• Endorsement Attesting the Recognition of Certificate Maritime Labor application forms</li> <li>• Marine Units Registration application forms Doing Business in Egypt Egyptian Organization for Standardization and Quality</li> <li>• Services Companies E-Establishment Service</li> <li>• Customs Tariff Service</li> <li>• Customs Services</li> <li>• Investment Dispute Settlement Committee</li> <li>• Government Procurement Portal</li> </ul>	Finance	<ul style="list-style-type: none"> <li>• Mortgage Financing Fund Services</li> </ul>
Cars	<ul style="list-style-type: none"> <li>• Traffic Service guides</li> <li>• Inquiry about vehicle license</li> </ul>	Governorates	<ul style="list-style-type: none"> <li>• Qaliobia Governorate E-Services</li> <li>• Beni sueif Governorate E-Services</li> <li>• Ismailia Governorates E-Services</li> <li>• Monoffiya Governorates E-Services</li> <li>• Cairo Governorate E-Services</li> <li>• Fayoum Governorate E-Services</li> <li>• Giza Governorate E-Services</li> </ul>
Complaints and Inquiries	<ul style="list-style-type: none"> <li>• Government Entities Maps Service</li> </ul>	Graduates	<ul style="list-style-type: none"> <li>• Government Job Vacancies</li> <li>• Ministry of Manpower Private Sector Vacancies</li> </ul>
Consular Services	<ul style="list-style-type: none"> <li>• Consular Services</li> </ul>	Health	<ul style="list-style-type: none"> <li>• Egyptian Medical Care Portal</li> <li>• Alexandria Dental Research Center Services</li> </ul>
Culture	<ul style="list-style-type: none"> <li>• Digital Assets Repository</li> </ul>	Judicial	<ul style="list-style-type: none"> <li>• Appeal Courts Services</li> <li>• Appeal Court Services - Cairo Courts</li> <li>• Primary courts Services</li> <li>• Court of Cassation Services</li> <li>• Legal Portal Services</li> </ul>

Education	<ul style="list-style-type: none"> <li>• Registration form for the general secondary exam</li> <li>• Preparing family record extract - First Time General Secondary Examination Results Services for Technical Diploma Students Follow-up Request to Transfer a Student From One School to Another</li> <li>• Register to the first stage in primary</li> <li>• Follow-up guardian to the absent of their sons in secondary education</li> <li>• Services for Egyptian Students Abroad University Hostels Applications</li> <li>• Equivalence of a scientific degree certificate University Enrollment Service</li> </ul>	Lost and Found	<ul style="list-style-type: none"> <li>• Lost and Found Service</li> </ul>
Environment	<ul style="list-style-type: none"> <li>• Environmental Services</li> </ul>	People With Disabilities Services	<ul style="list-style-type: none"> <li>• People With Disabilities</li> </ul>
Facilities	<ul style="list-style-type: none"> <li>• Electricity Services - Canal company for distribution of Electricity</li> <li>• North Delta Electricity Distribution Company South Delta Electricity Distribution Company Upper Egypt Electricity Distribution Company Alexandria Company for Electricity Distribution</li> <li>• Middle Egypt Company for Electricity Distribution</li> <li>• North Cairo Company for Electricity Distribution</li> <li>• Behira Company for Electricity Distribution Electricity Consumption Calculator</li> <li>• Inquiry about the Current State of the National Electricity Grid</li> </ul>	Personal Documents	<ul style="list-style-type: none"> <li>• Preparing family record extract - First Time Divorce Document Extract</li> <li>• Family Record Extract</li> <li>• Death Document Extract</li> <li>• Marriage Document Extract</li> <li>• Birth Certificate Extract</li> <li>• National ID Extract</li> </ul>

	<ul style="list-style-type: none"> <li>• Submission Of Electricity Meter Reading Telecom Egypt Service</li> <li>• Water Bill Enquiry Service</li> </ul>		
Traffic Fines	<ul style="list-style-type: none"> <li>• Traffic Prosecution Services</li> </ul>	Physicians	<ul style="list-style-type: none"> <li>• Doctors Charging Service</li> </ul>
Tourism	<ul style="list-style-type: none"> <li>• Events Calendar and Attraction Places Tourism Complaints to Tourism and Antiquities Police Travel Guide</li> </ul>	Real Estate and Notarization	<ul style="list-style-type: none"> <li>• Notarization services</li> <li>• Real Estate Offices Services</li> </ul>
Travel	<ul style="list-style-type: none"> <li>• Labor Permits Dep.</li> <li>• Egypt Air e-Ticketing Service</li> <li>• Passports Admin. guide</li> <li>• Bus Reservation Service</li> <li>• Trains Tickets reservation Service</li> </ul>	Seeking a Job	<ul style="list-style-type: none"> <li>• Government Job Vacancies</li> <li>• Ministry of Manpower Private Sector Vacancies</li> </ul>
		Taxes	<ul style="list-style-type: none"> <li>• Egyptian Tax Services</li> <li>• Taxes Inquiry and Payment Service</li> </ul>

Many of these services are limited to being a source of information rather than being a full-cycled service by which the citizen or beneficiary might initiate his request and track it until the full execution. In other services the citizen might use the e-government portal only for fill an application and attach documents while the service will still require his presence in these government offices. For instance the traffic and licenses authorities. Renewing the driving license in Egypt might require travelling from one governorate to another and this is due to the fact that the traffic licenses authorities in Egypt are not linked to one another through one main database.

#### E-GOVERNMENT DEFINITION



Some researches see the e-government in its broad to be the use of information and communication technologies (ICT) to support government functions and services, and to support citizens in their participation in political process.

Janja Nograšek explored among several definitions for the e-government among the: “Grant and Chau (2005, op. cit.: p. 9 in Jansen, 2005) see e-government as “a broad based transformation initiative, enabled by leveraging the capabilities of information and communication technology: (1) to develop and deliver high quality seamless, and integrated public services; (2) to enable effective constituent relationship management; and (3) to support the economic and social development goals of citizens, businesses, and civil society at local, state, national, and international levels”. OECD Report (2003a) points out that the implementation of e-government will aid a number of back office reforms, while alternatively, e-government requires such reforms in order to be successful.”

The definition which adopted by Egyptian government assumes the e-government as a part of the good governance. However, as Subhas Bhatnagar emphasized that there is no commonly accepted definition for the e-government but we find ourselves limited to see it as a structural change in the services provided by the governmental and semi-governmental bodies to the citizens

and businesses in efficient and transparent environment using information and communication technologies.

It is highly important to draw attention that there are another two definitions used by the governmental officers and employees who see the e-government as the using of internet and mobiles network to deliver the services to citizens and businesses. While the citizens themselves see the e-government as a tool to receive the governmental services in less time and to be of a cost effective approach by using the internet facilities.

It is clearly that the citizens stipulate the e-government by quantitative and qualitative conditions especially in a country such as Egypt where transporting need to receive the such service from any governmental office requires a lot of time and efforts considering the crowded streets to reach any governmental service outlet and the complicated procedures applied in Egypt where many services should be delivered from more than one service point usually not located at the same area.

In the case of e-government the change management process is not limited to the employees of the government but it is really goes in the context which make the beneficiaries of the service as a genuine part of it.

## **CHANGE MANAGEMENT**

E-government space of change is not limited to ICT areas even those areas are essential within the holistic change of the e-government requirement. But some of the definition from the IT areas seems to be valid up to certain point to the wider context in the e-government implementation. NUIT defines it as ensuring standardized methods, processes, and procedures facilitate efficient and prompt handling of all changes, and maintain the proper balance between the need for change and the potential detrimental impact of changes, thus contributing to maintain service level objectives.

More broadly, change management is defined as “the process of continually renewing an organization’s direction, structure, and capabilities to serve the ever-changing needs of external and internal customers’ (Moran and Brightman, 2001).

By examining the concept of change management we find the resistance is a genuine reaction in almost all the cases and it becomes difficult due to the work and social culture in the context of the change. Believing that the change management which includes the e-government project in Egypt is significantly huge by considering the size of the transactions required by the government and the complexity of its services which is among the different departments and units to serve more than 90 million inhabitants of Egypt and millions of visitors annually.

The resistance of such enormous change was expected to be extreme and the survey along with the interviews with the official employees who are working in both front and back office level emphasized this hypothesis.

Approximately 64% which is two third of the survey respondents saw that the e-government failed in overcome the routine in the Egyptian government. Compared to 9% who believed that the e-government was efficient in reducing the routine related to the government transactions. The rest of respondents expressed that there is no tangible difference between the previous case of the traditional environment and the e-government applications.

The interviewees shows that most of the services are not representing the assumed full cycle and it is limited to fill the applications while the routine job should be done at the end of day.

For their estimation of the beneficiaries' satisfaction 41% of the respondents believes that citizens are partially satisfied. While 27% saw them unsatisfied from the services, 32% tended to consider them satisfied from the e-government.

Satisfaction as per the in interviewees come from the fact that they reduce some of the procedures needed to perform a single service while the dissatisfaction stems out from the little understanding of the procedure flaw through the governmental concerned units which make it harder to trace their applications in many cases.

63% of the respondents strongly believe that the e-government boosts the transparency. While 21% believe it does not have any impact on the transparency. Whereas, the rest did not have the sufficient information or knowledge about this issue.

For the respondents point of view toward the opportunities to practice corrupted actions when handling the citizen and business transactions within the environment of the e-government. 39% believe that such environment eliminate the corruption. In contrast to 11% saw that to extreme extent. However, 44% believe it does not and the rest expressed their uncertainty toward this hypothesis.

Notably some interviewees saw that the problem of corruption at the level of the e-government scope is insignificant while the large scale corruption is practicing far from the limited scope of the e-government.

71% of the respondents did not receive the proper training about the e-government and 16% found themselves not well informed by the e-government. The rest believe to have very disarrayed information about it.

12% of the respondents feel the e-government will affect their career and lead the government to terminate their jobs in the short term. In comparison with 37% who sees that they will be made redundant in the long term. 29% sees the problem to decrease the future needs of the governmental employees.

Some interviewees even express doubts that the government will continue develop the e-government to the point where it will make a big reduction of its size for political reasons to avoid higher level of unemployment and they raise the question “what to do with us? What is the cost of throwing us away? ”.

## **CONCLUSION**

The Egyptian economy is recovering slowly but more need to be done to guarantee the improvement of the government efficiency and service delivery. The e-government cannot consider as a mature project which its fruition for the citizens still far. However, the interviews and survey answers clearly indicate that the government cadres were not well-prepared to deal with the e-government environment and the change management techniques to build the trust and lead to the adoption of the project which was almost absent.

## **RECOMMENDATION**

- Applying bottom-to-top approach to design the processes in the e-government applications to allow the employees at the front and back office to participate in order to adopt the e-government initiatives.

- Set an interactive system of the communication to share information and spread out awareness about the e-government.
- Boost confidence about the transparency among the governmental units themselves by systemizing their internal procedures.
- Increase the training of the government's employees on the e-government application and set a system for incentives and rewards for the outstanding performers.
- Document the successes stories and share it along the other governmental units and institutes.
- Mapping the related processes and procedures in simple way and allow the employees to access to this knowledge.

### **References :**

Scholl, Hans J (2010) E-Government: Information, Technology, and Transformation, volume 17. Advances in Management Information System, Routledge, London.

Nograšek, J. (2011) Change Management as a Critical Success Factor in e-Government Implementation, Business System Research Vol.2, No.2, 1-56, Zagreb.

Bhatnagar, Subhash (2004) E-Government: From Vision to Implementation - A Practical Guide With Case studies. Sage Publications, New Delhi

Northwestern University Information Technology (NUIT) (2011) – Change Management Process, Illinois

Moran John W. and Brightman Baird K (2000) "Leading organizational change", Journal of Workplace Learning, Vol. 12 Iss: 2, pp.66 – 74, Emerald publications, Bingley.

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<sup>i</sup>Egypt: from e-government to e-governance the road to fast pace development – conference paper (Proceedings of the 2nd International Conference on Theory and Practice of Electronic Governance, ICEGOV 2008, Cairo, Egypt, December 1-4, 2008)

<sup>ii</sup>As per UN E-government Knowledge Database the EGDI is a weighted average of three normalized scores on three most important dimensions of e-government, namely: (1) scope and quality of online services (Online Service Index, OSI), (2) development status of telecommunication infrastructure (Telecommunication Infrastructure Index, TII), and (3) inherent human capital (Human Capital Index, HCI)

$$EGDI = 1/3 (\text{OSI normalized} + \text{TII normalized} + \text{HCI normalized})$$

<sup>iii</sup><https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2016>

<sup>iv</sup><https://www.egypt.gov.eg/services/avlblservices.aspx?section=subjects>