The Impact of Applying E-Government to Improve the Performance of the Ministry of Education in Saudi Arabia

Alsalloum, Othman Ibrahim, Associated professor, Department of Management Information Systems, King Saud University, Email: Alsallom@ksu.edu.sa, web:http://faculty.ksu.edu.sa/alsalloum/
(November,2011)

Abstract- The purpose of this study is to identify the trends of directors in the Ministry of Education towards the adoption of e-government as well as the effect of e-government application on job performance and to discover the problems that could hamper the process of applying it and the availability of the necessary requirements to implement e-government to the directors in the Ministry of Education.

The study population is comprised of (115) directors in various administrative levels in the Ministry of Education in Riyadh. In order to achieve the purposes of study, the researcher designed a questionnaire consisting of 13 paragraphs on the Likert scale (Strongly Agree = 5, agree = 4, neutral = 3, disagree = 2, strongly disagree = 1). In this study, the researcher followed an analytical and descriptive approach that suits the nature of the research. Moreover, the stability of the questionnaire was verified by making a re-test with a one-week span.

From the analysis of responses of directors we discovered that e-governments in the current methodology has not yet reached a compromise with a full-system and still lacking in significant improvement in many respects, also that e-government does not only convert the service system and work to an electronic system, but it’s a complex and interrelated system and requires in-depth studies to all elements before completing the automation of all services.

The shift from traditional government to e-government with the invasion of new informational world represents a significant challenge to the government.

Index Term- E-business, E-Government, Employees performance development, Kingdom of Saudi Arabia, Ministry of Education.

I. INTRODUCTION:

The current decade is characterized by large and rapid developments in the field of technology, especially IT-related technology, which is caused by the advancement of technology, particularly in the field of the Internet, which affects many aspects of life in the world, so it is best to know the nineties of the last century by the Internet revolution, while we could call the first decade of the twenty first century as the decade of the a revolution of e-government.

Many countries take the advantage of the full features of information technology to strengthen the relations and interactions among individuals, businesses and governments as governments around the world apply the methods and electronic systems for the implementation of its operations and to provide significant benefits to governments, citizens and businesses. (Al-Azzam ,2001)

E-government has different aspects; the most important is the transition from a traditional government to a government that is electronically based on the Internet by overcoming practical barriers and the use of different electronic tools and systems which, in turn, supports the development processes, the disposal of the centralism, upgrading the level of performance and to address all the aspects of inertia and bureaucratic management in general.

It is hoped that the great scientific development in this field urges governments to strive hard to cope with the changes of the external environment and keep up with all the developments and take their advantage with the aim of increasing the efficiency and effectiveness of its administrative and organizational systems and achieving the national and organizational goals according to the modern scientific basis. (Badran, 2004)

Like the other countries, the public sector in Saudi Arabia witnesses a remarkable turning point in establishing strategies and organizational and administrative policies which take into account what has been achieved in the field of technology and using them to serve the functions and objectives of this sector. Therefore, this study comes as an attempt to determine the impact of applying the policy of e-government to job performance.

II. PROBLEM OF THE STUDY:

The problem of this study is to determine the impact of the application of e-government policy to job performance and identify the obstacles facing the education sector in Saudi Arabia in appropriately applying e-government process.

Therefore, this study will attempt to answer the following questions:

1- What is the effect of applying e-government policy to job performance in the Ministry of Education?
2- What are the attitudes of directors in the Ministry of Education towards the adoption of the systems and methods of e-government?

3- What are the obstacles that hinder the application of e-government in the Ministry of Education?

4- How can we find positive attitudes among directors in the Ministry of Education towards the implementation of e-government?

5- Has e-government achieved the desired objectives in the Ministry of Education?

II. SIGNIFICANCE OF THE STUDY:

1- This study addresses a modern and a very important subject at this time for the Saudi government because of its approach to adopt the strategies of organizational development and modernization in the systems of the public sector in the Kingdom of Saudi Arabia.

2- This study is particularly important for its compatibility with the directives of the Saudi government to implement the systems and concepts of e-government.

3- This study attempts to identify the important and vital for the application of e-government, especially as it relates to the human side, which is the core foundation for processes of development and modernization in general.

IV. OBJECTIVES OF THE STUDY:

This study seeks to achieve the following objectives:

1. Identifying the trends of the directors in the Ministry of Education towards the adoption of e-government.

2. Identifying the impact of e-government policy on job performance in the Ministry of Education.

3. Identifying the most important problems that could hinder the process of applying the concepts and systems of e-government for the directors in the Ministry of Education.

4. Attempting to analyze and understand the availability of the necessary requirements for the application of e-government for the directors in the Ministry of Education.

5. Providing necessary recommendations for supporting the efforts of the Ministry of Education in the application of concepts and methods of e-government.

V. HYPOTHESES OF THE STUDY:

This study attempts to validate the following assumptions:

• The first hypothesis:

There is no statistically significant relationship between the impact of applying e-government policy on job performance of the employees in the Ministry of Education.

• The second hypothesis:

There is no statistically significant relationship between the factors associated with information technology and the attitudes of the directors in the Ministry of Education towards the implementation of e-government.

• The third hypothesis:

There are no statistically significant differences between personal and job factors and trends of the directors in the Ministry of Education towards the adoption of e-government.

• The fourth hypothesis:

There are no statistically significant differences in the infrastructure available in the Ministry of Education towards the adoption of e-government.

VI. STUDY TERMINOLOGY:

A - Infrastructure: the availability of the material and moral requirements necessary for the application of the concepts and strategies of e-government.

B - Internet: global networks connecting users around the world for the purposes of access to data and information exchange. (Al-Sharif, 2003)

C - Intranet: a private network for the use of organizations which uses the criteria and rules of communication used in the Internet and can be used by employees of the organization only. (Al-Sharif, 2003)

D - E-mail: the use of Internet protocols and rules for the exchange of information or obtaining information from electronic mail box. (Al-Sharif, 2003)

E - Information systems: a set of tools, methods and computer systems which facilitate the process of obtaining and exchanging information and help to achieve organizational goals and the implementation of job tasks for various employees in various administrative levels.

F - E-government: the use of the product of the technological revolution in improving the levels of the performance of government agencies and raising their efficiency and effectiveness in achieving the desired objectives. (Al-Ta'i, 2005)
VII. RELATED LITERATURE:

First: The Theoretical framework of the Study:

The technological revolution led to radical changes and large communal changes which influenced the lives of individuals, business organizations and governments alike. This revolution emerged by the end of the last century and the beginning of the twenty-first century and resulted in the emergence of the so-called e-government or such similar terms that reflect the basic changes in the concepts of modern governments, their structures and systems of working. (Al-Taammah and Al-alośli, 2004)

The first decade of this century is considered the beginning of a special form of (public) government administrations which is so-called Dot-GOV-Decade exactly as the nineties of the last century were so-called the Internet or Dot-Com-Decade. The electronic revolution, which is based on the use of digital tools in all the fields, influenced the nature of work and plans of the institutions in both the public and private sectors alike and it is hoped that this may positively affect the lives of individuals, communities and human welfare in general.

Although various developed and developing governments alike are looking to convert to the concept of e-government, this still faces uncertainty in terms of the concept and the practical challenges and environmental datum that limit the ambitions in this field. Contemporary governments are seeking to achieve their ambitions through strategic planning, international cooperation and providing the appropriate environment since e-government became a title of administrative progress and an electoral slogan in the U.S. presidential campaign of 2000.

Researchers contribute to building the literature of e-government through scientific efforts that are embodied in making practical and theoretical studies, holding seminars, conferences and the issuance of scientific journals specialized in this field while the efforts of researchers are embodied in the attempt of governments to reform and develop the public sector. (Al-Tai, 2005)

The concept of e-business:

E-business: the application of information technologies and telecommunications in supporting of all business activities. E-commerce, as one of the examples of e-business, is done through the exchange of products and services between companies, organizations and individuals in an electronic way. E-business can be considered one of the basic activities of any business. E-business focuses mainly on the use of information and telecommunication technology to facilitate the external activities (work relationships with individuals, organizations and other companies) and internal activities in the organization as well.

Forms of e-business are several:

- Business to Business (B2B)
- Business to Customer (B2C)
- Business to Employers (B2E)
- Business to Government (B2G)
- Government to Business (G2B)
- Government to Government (G2G)
- Government to Citizen (G2C)
- Customer to Customer (C2C)
- Customer to Business (C2B)

- The concept of e-government:

The term e-government means the use of the product of the technological revolution in improving the levels of performance of government agencies and raising their efficiency and effectiveness in achieving their desired goals. This includes taking advantage of knowledge and the accompanied technical progress in broadening the scope of the beneficiaries of public services in terms of the availability of these services, improvement of their methods and offering them which is the ability to provide an access to government services by unconventional means i.e. electronic means which offer access to information and completing the exchange between government agencies and public users of its services at anytime and anywhere on the basis of equality and justice among all those concerned with public services. (Al-Sharif, 2003)

Although the global information network known as the Internet is a melting pot and the tool operator of the concept of e-government in practice, it includes many integrated aspects including work methods, technology, human elements and the development of legislations... etc. however, it's not a recipe or a bag ready for immediate use it rather needs many requirements which depend on the government's ability to provide and employ them in the sake of the shift towards adopting e-government.

E-government is considered an integrated philosophy and a radical shift in the realm of public administration at both the theoretical and practical levels. It is also a quantum leap and a peaceful revolution in the concepts, theories and methods so that it reflects positively on the overall picture of the government administrations i.e. it cancels the traditional perception embodied in the over routine, authoritarianism, nepotism and other forms of negative practices which accumulate in the minds of the people and harm their relations with government bodies. (Al-Otaibi, 2004: 25)

E-government represents a basic shift in the concept of public job as it reinforces the values of public service and the beneficiaries of the service become the focus of state institutions. It also goes beyond the concept of mere excellence in the performance of public services to the communication with the public through information...
and enhancing their role in participation and oversight. It also includes structural changes in the organizational structure of public administration and a development for a new relationship between it and citizens. (Al-Azzam, 2001)

- Reasons for the shift towards e-government:

An integrated range of factors resulted in the growing formal and academic calls to apply what is known as e-government which represents an emerging philosophy imposed by the digital revolution, globalization and democratic trends etc. This shift in the thought and practice of public administration is still in the ambitions phase and the beginning of the strategic plans to accomplish it even in the cradle of the advanced technological civilization. It is natural that such a shift is simply an ambition and a serious challenge for all developing countries, including rich and poor Arab countries since this shift cannot be accomplished through the availability of any comparative advantage alone such as finance, for example, it rather needs many factors, long-term plans and a gradual process according to the variables for each community. The reasons for the shift towards e-government can be classified as follows:

1. Acceleration of technological progress and its associated cognitive revolution:
   The technological revolution led to the emerging of many comparative advantages of its practical applications in various fields of human life including the quality of services and goods provided by the (public and private) institutions to the community. This revolution represents a unique opportunity for individuals, governments and business organizations to improve the quantity and quality of human life available. And the size of the growing investment in the technology sector requires the maximization of the benefits desired of it and dedicating it to facilitate the life and human welfare in general.

2. Trends of globalization and interdependence of human societies:
   Accelerating global trends contributed to the openness, interdependence and integration between different human societies in the emergence of what is known today as the phenomenon of globalization. The phenomenon of globalization represents a new philosophy of universal relations which has integrated political, economic, social, administrative, legal and environmental dimensions. The technological revolution offers tools of knowledge and technology to serve the requirements of globalization and achieve its objectives and put them into tangible and practical reality where effective correlation between human societies is achieved through the Internet and telecommunication, and other digital tools. This correlation includes information technology services and relations with all its economic, administrative, scientific, technical aspects... etc.

3. Democratic shifts and their accompanied changes and popular expectations:
   The world liberation movements which demand more openness, freedom, participation and respect for human rights contributed to bringing about radical changes in the communal structure in general and the nature of the political and social systems in particular. These changes were accompanied by an increase in the level of awareness and social expectations including the emergence of new insights for the public sector in all its dimensions. And on top of these visions comes the necessity of improving the overall performance of the public sector including its political, administrative and judicial institutions. This also includes supporting various aspects of democratic life such as political participation in elections and through other means as well as freedom of opinion, the establishment of parties, activating the people's control over the government acts and establishing the principles of legitimacy, institutionalism, accountability, justice...etc. This also includes the development of the effectiveness of the public sector and upgrading the level of performance of its institutions in terms of quality, quantity, timing and method. E-government represents an excellent opportunity to improve performance in the public sector.

4. Responding and adaptation to the requirements of the surrounding environment:

   The spread and application of the concept and methods of e-government in many organizations and communities make it require every nation to catch up the progress stage to avoid potential isolation and failure to keep pace with the era of speed and informatics. Competition in offering goods and services based on criteria easiness, effectiveness, efficiency, quality and appropriate quantity, i.e. it is not possible for any state or contemporary human society to live in a closed sphere without keeping up with the natural evolution of human life with its various dimensions. (Al-Taamna and Al-Aloshi, 2004)

The requirements of the shift towards e-government:

E-government represents a comprehensive shift in concepts, theories, methods, practices and structures and legislation upon which the public administration is based. It's not only a slogan or aspiration that can be achieved through a recipe or a foreign experience but it is a complex process and an integrated system of human, technical, informatics, financial, legislative, environmental factors...etc. Therefore, it is necessary to provide several integrated requirements to put the concept of e-government into practice in public
administration. Among the most important of these requirements include:

1 – The Social Awareness of the Concept and Requirements of e-government:

Inasmuch as the shift towards e-government is an integrated philosophy of values, goals, means and integrated systems, hence putting it into practice needs many efforts and requirements. The public awareness of the nature of this shift and the psychological, behavioral, financial readiness and other requirements of adaptation come on the top of the list.

2 - The development of education and training systems to suit the new shift:

E-government requires fundamental changes in the quality of the human elements that are suitable for it which means the necessity to reconsider education and training systems to meet the requirements of the new shift including plans, programs, methods and educational and training resources at all levels.

3 - Providing the appropriate technology and keeping up with the developments:

This means providing equipment and software as well as methods and sources of appropriate knowledge in all institutions and making them available to individual and institutional use to the widest possible range.

4 - Providing qualified human resources and consistently training to them:

This means taking into account the planning for the manpower and using the qualified elements and continuing their training and development to keep pace with technological development in all its dimensions.

5 - Developing legislative frameworks and updating them according to the latest developments:

This means issuing laws, regulations and procedures that facilitate the shift towards e-government and meet the requirements of keeping pace with it.

6 - Rational financial planning and allocating the adequate amounts:

This means reviewing the list of priorities and providing adequate funds to make the shift required in accordance with a time frame that suits the public circumstances and the peculiarities of each country.

7 – Building an advanced information system and updating it to cope with changes:

Information is considered the basis for any e-government and therefore the construction of developed information systems is a prerequisite in this field. The required information system should be characterized by inclusiveness for all types of data, information, updating, speed and easiness of storage, retrieval, use and readiness to serve the general purposes. Legislative and institutional frameworks appropriate for the effective linking of information systems at various national and global levels should be enacted. (Al-Otaibi, 2004)

- Dimensions and the possible effects of the shift towards the application of e-government:

The shift towards the concept of e-government and the required radical changes in management concepts and systems of work and inter-relations as well as domestic and world relations will reflect vital positive and negative effects alike in the various aspects of community life. These effects can be classified in the following major categories:

First: Political and Social Effects:

These are the overall reflections expected to occur as a result of the use of methods of e-government in public services, information and their related problems in this field. There are many questions posing themselves in these regards which are related to social justice, political participation, broadening the supervisory authority of the government, information security and confidentiality, social and political change which are expected due to the openness and technological globalization in the world. Will e-government guarantee equal opportunities for all those who are concerned with its services in terms of access to information or providing actual services and the responsibility for the development of social awareness and supporting the requirements of adaption to this shift? Will it ensure supporting the principle of participation in political life by all citizens or that will it be limited to the elite (Elite) in all its cultural, economic, social and technological levels? Political participation includes the interaction of the legislative power and citizens by giving opinions and comments on the draft laws which include the public policy of the state which will strengthen the role of citizens in this field.

Secondly: Economic and Financial Effects:

There are numerous and inter-connected economic and financial effects for the shift towards the concept of e-government and the accompanying systems and methods of work as well as regulatory, legislative and human requirements. One of its basic objectives is to provide better services at lower costs. The costs include the direct financial cost and the other costs due on the beneficiaries of public services and those costs burdened by the national economy through the import of technology or the investments needed for the electronic shift of as well as building information systems, etc.,
which means that it is expected that the cost of public services will decrease on the one hand and increase on the other.

Third: Administrative and Regulatory Effects:

These effects include radical changes in management concepts and theories i.e. on the academic level. It also includes significant changes in structural, organizational, human, procedural and legislative levels i.e. the practical dimension of management. This requires vigorous academic efforts in all fields of research as well as theoretical and practical studies, surveys, seminars and conferences which generally aim to achieve the theoretical basis of e-government which, in turn, will make it easier to develop a new identity for the public administration to be able to keep up with the accelerated developments in this field. The academic level includes the restructuring of the concepts of public administration appropriate for the required shift including the development of the concepts of public service, supporting popular participation in its various aspects, activating control and information systems and improving public sector transparency in dealing with the communal issues and so on.

Fourth: Technological Effects:

I is expected that the shift to e-government will lead to the increase of overall demand for electronic products with its integrated cognitive and financial dimensions. This also presents an additional challenge to producers of technology to bring about more development and broadening of investment in the technology sector in order to meet the increasing quantitative and qualitative needs in this field. This also includes expansion in academic programs and plans for technological development in universities and scientific institutes in order to fit the quality of educational graduates with the requirements of e-shift and the needs of the labor market which means more investment in the different stages of the education sector especially higher education.

Fifth: Environmental Effects:

The e-shift affects all environmental aspects including natural and human aspects as the natural environment gets affected by some risks such as pollution, overuse of energy sources, raw materials, etc., The technological shift affects many sides of humanity aspects such as values, customs, social traditions, the nature of human needs and human behavior in general. One of the possible risks of this shift is the violation of the principle of individual privacy and exposing the security of information at all levels to risk. New problems and crimes such as robbing the information and balances in banks, harming others through computer programs such as spreading electronic viruses and the resulting effects and loss of money, equipment and information may appear. (Al-Bakri, 2001)

- The Objectives of e-government:

E-Government supports classic governments' operations in terms of providing services automatically to the beneficiaries and their participation in decision making and achieving more transparency in the ruling process. It also aims at decreasing the financial burden in public administrations in terms of the cost of a service along with maintaining high levels of the quality of services quality. Since e-government will target different groups of beneficiaries, it is possible to provide electro-government goals according to the following fields:

First: The Government – Public domain:

In the field of the government's relationship with its citizens, the most of the goals of e-government will be in favor of the well-being of the citizen and his participation in governance. According to the first strategic objective, the government can deliver the service to the citizen; instead of getting him achieve them, through the Internet and communications technology. Meanwhile, the systems of e-government in the field of e-voting and e-election help to broaden the scope of popular participation in the democratic process.

Second: The Government – Institution Domain:

E-government, in this field, aims at activating the economic cycle through facilitating business institutions transactions whether these institutions are domestic, regional or global.

Third: The Government – Government Domain:

At the domestic governmental level, it will be at the heart of the objectives of e-government the goal of bridging the information and procedural gap among various public ministries and administrations in addition to raising the standards of efficiency, effectiveness and performance of procedures and domestic governmental systems such as the automation of all public administrations, for example.

Fourth: Government – Foreign Domain:

One of the main objectives of e-government in this field is the integration of the government in a cost-effective way in the foreign domain. It is possible to enumerate some of the detailed objectives such as supporting tourism through providing services and tourist information about the country's institutions to foreign tourism institutions or to foreign citizens. Encouraging foreign investment is considered one of the objectives in this regard.
As we have seen, e-government is seeking, through its new model, to contribute to boost the national economy and improve the image of the country in general as well as to serve the most important element in society, namely the citizen. (Al-Azzam, 2001)

A- Departments and areas of e-government:

In order to facilitate the requirements of transition to the form of e-government, we will divide the operations of e-government into four main departments to perform the most work of the government. As we know, e-government provides e-services via the internet, achieves internal efficiency and collects the money paid for services and taxes of all kinds. It will be easy for the administration to deal with the range of these services as organizational entities so it becomes possible to assign different officials for each service channel or department of e-government. The following diagram shows e-government departments and areas (Badran, 2004):

The departments and areas of e-government

A. E-services:
They include all public services provided by the government to its audience, such as renewing a driver’s license, issuance of birth certificates, statement of income, participation in governmental mobile services, information about the weather conditions in addition to different sector services such as e-health and e-education. Given the nature of e-government, it is possible to provide these services 24 hours a day and throughout the year. Usually a unified electronic gateway is established to access those services that are organized and grouped into bundles of services which meet the needs of citizens and businesses and not the government agency that provides them, in addition to the internet channel as a way to get these services. It is possible for the government to provide a part of them through other channels.

B- E-democracy:

It is a department of e-government which is concerned with the sensitive issues to the country and its democratic image. It addresses the topics of citizen’s participation in the process of accountability through providing adequate information on the performance of the government through the Internet and other various technological means. On the other hand, with a highly efficient protection system, it is possible for the citizens to participate in elections through the Internet thus it leads to increased participation rate and quick release of results as well as reducing the consumption of human resources required to organize ballots and voting.

Among the services that the government can provide in this area:

1. Online discussion forums designed to expand the circle of citizens who wish to have a say in government policies.
2. Political campaign websites.
3. Carrying out online polls on controversial issues which may be of interest to the citizen.
4. Publishing and documenting the minutes of parliamentary and government meetings via the internet and other channels.

There is no doubt that the issue of democracy and e-participation is one of the contentious issues open for discussion as it addresses the key issues at the heart of the governance process and any wrong or revoked application may expose public confidence in the government to danger. Since the democratic process is based on three inter-related political, institutional and popular corners, it becomes necessary for the tools of this democracy whether it is physical or electronic to reach all categories and elements of these corners.

On its part, the Swedish government spoke about five dimensions of e-democracy process, namely:

1. Electronic voting systems: it should be developed to adopt honest and reliable systems which allow voters to cast their ballot only once. Moreover, it should be used and accessed easily by citizens.
2. Political activities via the Internet: promoting the dissemination of the agendas of the parties and of different powers in addition to developing political relationship between the people and the state and developing the concept of e-communities through the establishment of e-communities.
3. Promoting transparency and e-confidence through the publication of all government documents over the internet except in cases of security and military documents or which harm if published more than to be hidden. Such step will help the government fight administrative corruption because of the disclosure of information to the people who will hold officials accountable for what they read and watch.
4. Democratic participation: carrying out polls electronically and the dissemination of government
decisions to be taken in order to explore the citizens’
views concerning them.
5. The digital gap: This is the most dangerous
dimension in the process of e-democracy taking into
account that the percentage of Arab citizens who can
use this technology is very modest compared to the
total number of the population is in most of the Arab
countries. It is necessary for the government to pay
attention to the danger of falling into the trap of
“democracy” while trying to expand and revitalize
the democratic process.

The practical tools of the e-democracy is not limited
to establishing websites as it is possible to benefit
greatly from the various techniques currently expected
to address all phases of the e-governance starting from
the government drawing up an agenda and to decision-
making and the implementation and accountability for
consequent results.

E-commerce:

E-government operations include transactions which
may lead to financial results such as selling
governmental used furniture on e-auction websites or
through the implementation of government transactions
online and charging for public services including the
tickets for public swimming pools and parks directly
through the internet. We can count a significant number
of transactions in which the government is a commercial
party either a creditor or debtor with citizens or business
institutions. In support of these operations e-government
should secure means of electronic payment on both the
technical and legislative levels.

It is needless to say that providing public services
online for citizens without supporting them with means
and methods of e-commerce and means of payment and
after-service review will not achieve the desired result
of the efficiency, effectiveness and well-being. On the
other hand, e-commerce governmental services will
help government reduce the cost of procurement
management to a great part because of saving the time
directors would take searching the catalogs and making
price comparisons.

On the other hand, the government can develop its
business model to a large extent within its environment
by adopting the provider of e-government service
principle. Government can also sell the news, climate
data in addition to the rental places for commercial ads
on its websites in order to match the nature of
government services. For example, the government can
sell Ads for children's products in the same location
where the service of issuance of a birth certificate is.
Moreover, it can sell ads for books, institutions
stationery where e-education services are provided and
so on.

E-government could benefit to a large extent from e-
markets on the internet such as the Arab merchant’s
network (Tajer Net), which owns a website for
transactions so that traders can offer their goods for
purchase and request purchase offers with a directory
for companies in the Arab world. The government may
enter into a cooperation agreement with such networks
to request bids for its purchases and display its used
furniture which it put up for auction.

E-Management:

The electronic management constitutes the backbone
of e-government. It is about the internal processes that
do not appear directly to the citizen or the organization
but through its results such as the management of
citizen and institutions’ relations and linking public
administrations and ministries through integration
systems and the automation of the entire basic functions
of the classic government. However we could talk in
this area about database systems, archiving systems and
document management, geographic information
systems, financial systems, personnel systems and
various IT activities that aim to support the
administrative processes of the government.

It is noteworthy that in this new wave of
management we need to hone the officials’ skills
concerning e-government projects and train them at the
level of the ordinary directors and employees to enable
them lead this change. To achieve this goal, some
countries have followed specific methodologies to
improve administrators’ skills of the classic
administration and then to the e-administration. For only
one example, we recall the German scheme to develop a
German e-governamental model and accelerate its
application which contained a guidebook to use
e-government, its technologies and tools. The guidebook
in question addresses, through several different
chapters, the senior management board, the officials of
information security and the directors of sub-projects in
the government. Moreover, it explains the existing
technologies and the best of the up-to-date technology
in this area. (Badran, 2004).

Benefits of e-government:

Multiple governments are competing economically;
they want to attract the world business activities. Of
course, they are under the pressure of costs as they find
it difficult to curb the internal expenses while facing the
priorities related to expenses. Businesses as well as
citizens aspire for better level of services and the more
there is a widespread use of technology the more
expectations and hopes that governments will have to
use that technology to provide better services in a more
comfortable way.
E-government provides the following services:

- Services more related and responsive to the needs of the masses.
- Comprehensive services and lower costs.
- Reducing reliance on paperwork.
- Improving means of access to information.
- Lower administrative costs with respect to commercial transactions of the government and the private sector.
- Transparency in dealings.
- Better development of governments so that they become more closely related and responsive in addition to easier access to them. (Al-Sharif, 2003)

Second, previous studies:

There are many studies related to the subject, the following is a review of the most important of these studies:


  The study main focus was to identify the reality of e-government in Jordan. 100 questionnaires have been distributed to the upper and middle administrative levels. The study has concluded the following results:
  1. A statistically significant relationship between the application of e-government and the quality of service provided electronically.
  2. A statistically significant relationship between the following dimensions: the technology necessary for improving e-government services, exchanging information, supportive partner, focuses on action, updating laws and legislation) and the quality of service provided electronically (al-Sharif, 2003).


  The study aimed to clarify the concept of e-government in general and the goals expected in supporting the development with shedding some light on the extent of its application in the Hashemite Kingdom of Jordan, where the study pointed out that the increasing need for accurate and modern information from and administrative and management processes, in addition to its availability through the use of modern information systems and communications technology contributes positively to the development process. The use of technological techniques including e-government plays a remarkable role in the development by raising efficiency and effectiveness of completing works, tasks and enhancing the capacity of working staff as well as supporting the public service. It provides new information necessary for the administrative operations fundamental to the development process such as planning, control and decision-making. (Al-Azzam, 2001).

- Al-Azzam’s Study (2001) entitled: "e-government in Jordan: the possibility of application."

  This study aims to know the impact of the possibility of applying e-government system in Jordan in terms of availability of technology, manpower and the necessary legislation.

  The study concludes the following results:

  A. The subject of e-government is one of the newly emerging topics in the context of globalization and the change on both global and Jordanian level.

  B. E-government these days is in demand and not a luxury for departments seeking efficiency and effectiveness in the implementation of their works as the limited resources and increasing demand for government goods and services continue to increase and we must face it in ways more efficient and effective.

- Al-Khaluf’s study (2010) entitled: “The fact of Applying e-administration in the Public Secondary Schools in the West Bank from the perspective of Directors and Directors”

  This study aims to identify the reality of applying the e-governance in the public secondary schools in the West Bank from the perspective of directors and directors, in addition to studying the effect of the study variables (sex, administrative experience, qualifications, the field of specialization, geographic location, the location of the province and the number of training courses in the field of the e-administration).

  The study concludes the following results:

  First, there is the reality of a low application of e-administration in the public secondary schools in the West Bank from the perspective of directors and executives.

  Second, There are statistically significant differences at the level of the function (α = 0.05) in the reality of applying e-administration in the public secondary schools in the West Bank from the perspective of directors and directors due to the variable of sex in favor of males, the variable of academic qualification in favor of master degree and higher degrees holders, the variable of geographic location in favor of the city and the variable of training courses number in the field of e-administration in favor of those who had one or more training courses in the field of e-administration.

  Third, there are no statistically significant differences at the level of the function (α = 0.05) in the reality of
applying e-administration in the public secondary schools in the West Bank from the perspective of directors and directors due to the variables of administrative experience, area of specialization or the location of the province.

- Bukhari’s study (2008) entitled: "The possibility of Applying e-administration in the Public Administration of Education in the Holy capital of (Benin)

Objectives of the study:
1. Identifying the degree of importance for implementing e-administration in Public Administration of Education in the Holy Capital.
2. Identifying the most important factors for the applicability of e-administration in the Public Administration of Education in the Holy Capital.
3. Identifying the main obstacles to the application of e-administration in the Public Administration of Education in the Holy Capital.
4. Determining the statistically significant differences between members of the study sample for the possibility of applying e-administration due to the following demographic variables: academic qualifications, current work, years of experience, and computer courses.

The most important results of the study:
1. The members of the study sample believe that it is important to apply e-administration in the Public Administration of Education in the Holy Capital.
2. The members of the study sample believe that there are factors that help in the potential application of e-administration in the Public Administration of Education in the Holy Capital.
3. The members of the study sample believed that there are obstacles to the application of e-Governance in Public Administration Education in the Holy Capital.
4. There are statistically significant differences in the obstacles for the application of e-administration attributable to the academic qualification in favor of those holding M.A.
5. There are statistically significant differences in the obstacles for the application of e-administration due to computer courses for the benefit of those who had more than three courses.

VIII. METHODOLOGY OF THE STUDY:

First, curriculum:

The researcher applies the analytical and descriptive approach for its relevance to the nature of the research. The descriptive curriculum: is that kind of studies that are conducted by questioning all members of the study in order to describe the phenomenon under study in terms of its nature and degree of existence. Since this study relies on data collection and data analysis, this approach is applied through it.

Second, the population and sample selection of the study:

The study community consists of (115) groups of directors at different administrative levels in the Ministry of Education in Riyadh. Due to the small size of the study community, the researcher has decided to survey the views of all members of the research community, therefore, (115) questionnaires have been distributed on the study sample of which (100) forms were returned back true and complete and (10) questionnaires were incomplete and some with negative comments, and (5) questionnaires were not returned.

Third, data collection tool:

A questionnaire consisting of thirteen questions is answered according to Likert scale (Strongly Agree = 5, agree = 4, neutral = 3, disagree = 2, strongly disagree = 1).

Fourth, data collection procedures:

- Drafting of the paragraphs of the questionnaire:

After being developed, the questionnaire was submitted to Dr. Othman Al-Salloum, vice dean of E-education and Distance Learning Faculty to revise it and prove the extent of its clarity of paragraphs and make any needed amendments, then the researcher gave the questionnaire to six directors in the Ministry of Education in Riyadh to read and show the extent of clarity of paragraphs and write the word "clear" next to the paragraphs that they thought they were quite clear or write the word "not clear" next to the paragraphs that they thought not clear and after explaining the meaning of the phrases which they noted that they were not clear they were asked to reformulate these paragraphs to give the meaning explained by the researcher. Thus, the paragraphs that were not clear to some members of the group were re-worded.

- Ratifying the questionnaire:

The researcher introduced the questionnaire to eight arbitrators including Dr. Othman Al-Salloum and seven MBA students in the Faculty of Business Administration, Department of Public Administration at King Saud University, whereas the paragraphs were incorporated and then the arbitrators were asked to express their opinion as to whether paragraphs measure the area assigned to be measured then the researcher amended the wording of paragraphs according to the suggestions of the arbitrators.

- Standards Stability Test:

The researcher calculated the coefficient stability of the tool using (Cronbach’s Alpha). The coefficient stability of the questionnaire was 0.894, a highly stable coefficient which is reliable in the application of performance. The researcher concluded to stability by using the same criterion for each area the study
(questionnaire) separately according to their sequence in the of study questionnaires, Table (1).

Table (1) show stability rate for each area of the study

<table>
<thead>
<tr>
<th>Area</th>
<th>Cronbach h's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed in completing the work</td>
<td>0.811</td>
</tr>
<tr>
<td>Easiness of work procedures</td>
<td>0.794</td>
</tr>
<tr>
<td>Completion of the largest number of tasks</td>
<td>0.919</td>
</tr>
<tr>
<td>during the work hours</td>
<td></td>
</tr>
<tr>
<td>Reducing errors associated with the human</td>
<td>0.958</td>
</tr>
<tr>
<td>factor</td>
<td></td>
</tr>
<tr>
<td>Achieving the principle of organization</td>
<td>0.921</td>
</tr>
<tr>
<td>and time management which is a feature of</td>
<td></td>
</tr>
<tr>
<td>e-government</td>
<td></td>
</tr>
<tr>
<td>Limiting paperwork cards in the administrative</td>
<td>0.864</td>
</tr>
<tr>
<td>work and reducing costs</td>
<td></td>
</tr>
<tr>
<td>Reducing the work pressure on staff</td>
<td>0.889</td>
</tr>
<tr>
<td>Saving the number of staff in the ministry</td>
<td>0.825</td>
</tr>
<tr>
<td>Achieving the common aim of different</td>
<td>0.921</td>
</tr>
<tr>
<td>departments</td>
<td></td>
</tr>
<tr>
<td>Eliminating the congestion in the ministry</td>
<td>0.926</td>
</tr>
<tr>
<td>Help people access public services 24 hours</td>
<td>0.938</td>
</tr>
<tr>
<td>a day and seven days a week</td>
<td></td>
</tr>
<tr>
<td>Achieving Justice (reducing mediations) in</td>
<td>0.858</td>
</tr>
<tr>
<td>the provision of public services</td>
<td></td>
</tr>
<tr>
<td>Providing opportunities for advancement and</td>
<td>0.947</td>
</tr>
<tr>
<td>progress in the career path of individuals</td>
<td></td>
</tr>
</tbody>
</table>

- Statistical methods used in the study:
  Statistical treatment has been conducted by computer using SPSS program. The researcher has been using the following statistical methods:
  - Frequency and percentages Frequencies to describe the sample and determine the level of approval.
  - Cronbach Alpha coefficient.
  - The arithmetic mean is calculated as values (weights), as in the following table:

Table (2), calculating values (weights)

<table>
<thead>
<tr>
<th>Approval degree</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
</tr>
<tr>
<td>Agree</td>
<td>4</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>5</td>
</tr>
</tbody>
</table>

Then the direction of the Likert five- Scale is determined as in Table (2). It is noted that the length of the period used in the table is (5 / 4), or about 0.80 and was calculated on the basis that the five digits 1, 2, 3, 4 and 5 had had between them 4 spaces.

- Testing one-way variance analysis of One Way ANOVA to determine differences in the level of the degree of approval for the words of the study according to the variable.
- Testing Dunnett’s T3 to locate differences between the parties.

Table (3), shows how the direction is determined through the weighted average

<table>
<thead>
<tr>
<th>The weighted average</th>
<th>Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1.79</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>1.80-2.59</td>
<td>disagree</td>
</tr>
<tr>
<td>2.60-3.39</td>
<td>Neutral</td>
</tr>
<tr>
<td>3.40-4.19</td>
<td>Agree</td>
</tr>
<tr>
<td>4.20-5</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Results Analysis:
- Sample description:

Table (4), Distributing the study sample according to age group

<table>
<thead>
<tr>
<th>Age group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25</td>
<td>%10</td>
</tr>
<tr>
<td>25-35</td>
<td>%35</td>
</tr>
<tr>
<td>35-45</td>
<td>%30</td>
</tr>
<tr>
<td>46 and more</td>
<td>%25</td>
</tr>
</tbody>
</table>

The results of Table (4) above indicate that the top percentage was in the age group (25-34); it reached (35%) of the members of the study sample, while the lowest percentage was in the age group (less than 25 years).

Table (5), Distributes the study sample according to the academic qualifications

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary</td>
<td>%10</td>
</tr>
<tr>
<td>Diploma</td>
<td>%20</td>
</tr>
<tr>
<td>Bachelor</td>
<td>%65</td>
</tr>
<tr>
<td>Post-Graduate</td>
<td>%5</td>
</tr>
</tbody>
</table>

The results of Table (5) above indicate that the highest percentage of the members of the study sample are the holders of bachelor's degree and that the lowest percentage is the holders of post-graduate studies as they reached (5%).
Table (6), distributing the study sample according to experience

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5</td>
<td>%30</td>
</tr>
<tr>
<td>6-10</td>
<td>%45</td>
</tr>
<tr>
<td>11 and more</td>
<td>%25</td>
</tr>
</tbody>
</table>

The results of Table (6) indicate that the highest percentage of the members of the study sample is that for those with experience of 6-10 years, and that the lowest category is 11 years and as it reached (25%).

Table (7), distributing the study sample according to Job Title

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>%20</td>
</tr>
<tr>
<td>Deputy Director</td>
<td>%15</td>
</tr>
<tr>
<td>Assistant Manager</td>
<td>%15</td>
</tr>
<tr>
<td>General Manager</td>
<td>%10</td>
</tr>
<tr>
<td>Officer</td>
<td>%12</td>
</tr>
<tr>
<td>Secretary</td>
<td>%9</td>
</tr>
<tr>
<td>Other</td>
<td>%19</td>
</tr>
</tbody>
</table>

The results of Table (7) shows that the highest percentage of the members of the study sample are those titled director and the lowest percentage is that of the group of people titled secretary as it reached (9%).

Discussing results and testing hypotheses:
The arithmetic mean and the standard deviation of the study questions were concluded and summarized as follows:

Table (8), arithmetic means for the study sample answers

<table>
<thead>
<tr>
<th>Question</th>
<th>Arithmetic mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed in completing the work</td>
<td>3.7900</td>
</tr>
<tr>
<td>Facilitating the work procedures</td>
<td>3.7000</td>
</tr>
<tr>
<td>Completing the largest number of tasks during the working hours</td>
<td>4.0700</td>
</tr>
<tr>
<td>Reducing errors associated with the human factor</td>
<td>3.7200</td>
</tr>
<tr>
<td>Achieving the principle of organization and time management which is a feature of e-government</td>
<td>3.6800</td>
</tr>
<tr>
<td>Limiting paperwork cards in the administrative work and reducing costs</td>
<td>3.4400</td>
</tr>
<tr>
<td>Reducing the work pressure on staff</td>
<td>3.4100</td>
</tr>
</tbody>
</table>

The most important results shown by table (8) are the following:
1. 76.75% of respondents believe that the use of e-government helps achieve the greatest number of tasks during the working hours.
2. 69.75% of respondents believe that the use of e-government leads to the speed in completing the work.
3. 68% of respondents believe that the use of e-government helps reduce errors associated with the human factor.
4. 59.75% of respondents were neutral with respect to that the use of e-government to achieve the interconnection between the various departments.
5. 58.5% of respondents were neutral with respect to the use of e-government that leads to opportunities for promotion and progress in the career ladder of individuals.
6. 57.5% of respondents were neutral with respect to the use of e-government that leads to savings in staff numbers in the ministry.
7. 55% of respondents were neutral with respect to the use of e-government that leads to the elimination of congestion in the ministry.

Hypotheses testing:
The first hypothesis:
Ho: There is no statistically significant relationship between the impacts of employing e-government policy on the job performance of employees in the Ministry of Education.
Ha: There is a statistically significant relationship between the impact of employing e-government policy on the job performance of employees in the Ministry of Education.

Table (9), the results of testing the first hypothesis

<table>
<thead>
<tr>
<th>The result of the negative hypothesis</th>
<th>SIG T</th>
<th>(T) as in table</th>
<th>(T) as calculated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saving the number of staff in the ministry</td>
<td>3.3000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieving the common aim of different departments</td>
<td>3.3900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eliminating the congestion in the ministry</td>
<td>3.2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help people access public services 24 hours a day and seven days a week</td>
<td>3.5800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieving Justice (reducing mediations ) in the provision of public services</td>
<td>3.5800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing opportunities for advancement and progress in the career ladder of individuals</td>
<td>3.3400</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The second hypothesis:

Ho: There is no statistically significant relationship between the factors associated with information technology and attitudes of directors in the Ministry of Education toward the adoption of e-government.

Ha: There are statistically significant differences between the factors associated with information technology and attitudes of directors in the Ministry of Education toward the adoption of e-government.

Table (10), testing the results of the second hypothesis

<table>
<thead>
<tr>
<th>HO</th>
<th>F Abstract value</th>
<th>F Tabulated value</th>
<th>F Calculated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refusal</td>
<td>0.012</td>
<td>2.7</td>
<td>3.868</td>
</tr>
</tbody>
</table>

ANOVA Test has been used in the above case. Through reading the computer-based results on the previous table we found that the value of F calculated = 3.868 i.e. it is greater than its tabulated value. Since the decision rule is: accept the premise of nihilism (Ho) if the calculated value is less than the tabulated value and reject the nihilistic hypothesis (Ho) if the calculated value is larger than the tabulated value and therefore we reject the nihil hypothesis (Ho) and accept the alternative hypothesis (Ha). This means that there is a relationship between factors associated with information technology and attitudes of directors in the Ministry of Education toward the application of e-government.

Third hypothesis:

Ho: There are no statistically significant differences between personal and functional factors and the attitudes of directors in the Ministry of Education towards the adoption of e-government.

Ha: There are statistically significant differences between personal and functional factors and the attitudes of directors in the Ministry of Education towards the adoption of e-government.

Table (11), testing the results of the third hypothesis

<table>
<thead>
<tr>
<th>HO</th>
<th>F Abstract value</th>
<th>F Tabulated value</th>
<th>F Calculated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refusal</td>
<td>0.000</td>
<td>2.5</td>
<td>9.164</td>
</tr>
</tbody>
</table>

ANOVA Test has been used in the above case. Through reading the computer-based results on the previous table we found that the value of F calculated = 9.164 i.e. it is greater than its tabulated value. Since the decision rule is: accept the premise of nihil hypothesis (Ho) if the calculated value is less than the tabulated value and rejects the nihil hypothesis (Ho), If the calculated value is larger than the tabulated value and therefore we reject the nihil hypothesis (Ho) and accept the alternative hypothesis (Ha). This means that there is a relationship between factors associated with information technology and attitudes of directors in the Ministry of Education toward the adoption of e-government.

Fourth hypothesis:

Ho: There are no statistically significant differences between the infrastructure available in the Ministry of Education towards the adoption of e-government.

Ha: There are statistically significant differences between the infrastructure available in the Ministry of Education towards the adoption of e-government.

Table (12), testing the results of the fourth hypothesis

<table>
<thead>
<tr>
<th>HO the result of the nihilistic hypothesis</th>
<th>SIG T</th>
<th>T Tabulated value</th>
<th>T Calculated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval</td>
<td>0.324</td>
<td>1.9842</td>
<td>0.992</td>
</tr>
</tbody>
</table>

T-Test for independent sample has been used in the above case. Through reading the computer-based results on the previous table we found that the value of T calculated = 0.992 i.e. it is lesser than its tabulated value. Since the decision rule is: accept the premise of nihilism (Ho) if the calculated value is less than the tabulated value and rejects the hypothesis of nihilism (Ho), if the calculated value is larger than the tabulated value and therefore we accept the nihilistic hypothesis (Ho) and reject the alternative hypothesis (Ha). This means that there is a relationship between the infrastructures available in the Ministry of Education toward the adoption of e-government.

IX. FINDINGS AND RECOMMENDATIONS:

First: Findings:
The most significant findings of this study are as follows:

1. Findings of the study include that the use of e-government helps achieve the greatest number of tasks during working hours as well as lead to the speed in completing the work and helps reduce errors associated with the human factor.

2. The respondents were neutral with respect to the view that e-government leads to the interconnection between the various departments and it provides opportunities for promotion and progress in the career ladder. They were neutral also about the view that it leads saves staff numbers and they were also neutral with respect to the view that it leads to the elimination of congestion in the ministry.

3. E-government in its current pattern has not yet reached the full version of the system but still lacking in significant improvement in many aspects.

4. E-government is not only convert service system and work to the electronic system, but it is also a complex and interrelated system which requires deep and careful studies of all its elements before the full transition to the application of all services.

5. The development of e-government system could result in some negative aspects that must be handled with extreme caution.

6. The transition from traditional government to e-government along with the invasion of new information represents a great challenge to the current government.

Second, Recommendations of the Study:

It is necessary to understand the different components of e-government system as well as identify the requirements of each component with the aim of activating the positives and reducing the negatives in the context of transition to the pattern of e-government.

1. We should not import ready-made templates for e-government and apply them directly in our Arab societies but we must conduct appropriate studies which make e-government system compatible with each individual society; because of the difference in the circumstances and factors that make up each component of e-government.

2. To eliminate the problem of computer illiteracy and spread the IT culture in the Arab world before the application of the concept of e-government.

3. To study the negatives that may arise as a result of the application of e-government such as the problem of unemployment and privacy and try to find appropriate solutions in advance as well as achieve information security.

4. To activate the role of the private sector in the transition to e-government pattern to ease the burden on governments as well as provide trained workers in the field of IT and raise the public ability to deal with these new technologies.

5. To form workshops made up of all communication and computer departments in the government sectors and to analyze the current infrastructure required for all government sectors with creation them a united infrastructure.

6. To unify databases, software and similar applications shared by government sectors through joint workshops and to provide technical staff for communication and information technology.

7. To provide the appropriate financial support covering all the technical and software costs in government sectors.

8. To unite the efforts and show sincerity in work and coordinate among us to achieve the desired goals of everyone and catch up with progress from the very beginning.

9. Bibliography:


