Kurdistan Region E-Government, Requirements and Benefits

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ABSTRACT

The start of the twenty-first century and expansion in the use of the internet brought about great developments in the techniques of information technology (IT) and communications. These developments have greatly affected the life activities of most societies, and the most obvious example of this effect is the translation of daily activities, including government work, from the traditional to the electronic (digital). This transformation caused most governments to seek the development of strategic plans to employ these techniques as well. The goal is to gradually employ the new style of management to provide services and communicate with their citizens from the previous traditional paper style (paper based activities) to the new electronic pattern known as Electronic Government (E-Government).

This transformation requires the understanding and performing of analytical and critical studies of the idea of E-Government. This understanding will help to demonstrate the pros and cons of this transformation, its requirements, and the social and economic impacts resulting from it.

The research uses an analytical approach to define the concepts of E-Government system, to demonstrate the pros and cons of the system, and to show the challenges of applying the system on the activities of the Kurdistan Regional Government of Iraq.

The most important idea of this research is that the E-Government is a system consisting of a set of interrelated elements that must be understood well in line with the reality of social, economic, cultural, political and technical of the Kurdistan region.

Keywords: E-Government, Kurdistan region, information technology, communication, transformation, citizen, services

1. INTRODUCTION

The revolution in information technology and communications taking place in our modern world represents one of the pillars of the economic and social developments. It has had a positive impact in the creation of new elements and tools linked to life activities and have opened a wider view in the implementation and performance of daily activities by means of electronic (digital) tools.

In the midst of this rapid development, we find that the use of applications associated with this information revolution tend to change the concepts and methods of business implementation and delivery of services. It allows the access and creation of new methods of communication between different parties in government institutions or even between people within these institutions and various business sectors.

The opportunities offered by this technology include: improving performance, reducing the bureaucracy in administrative work, ensuring effective management of human resources and renovation of the methods and techniques of administrative work, and the ability to perform distance administration for services and transactions by means of electronic tools. These capabilities lead to growing interest from governments, region states, and international organizations to use this technology in order to reduce costs and improve performance for their business, enhance the level of living of individuals, and to achieve an acceptable level of satisfaction, which led to the emergence of concepts and new terminology in the various fields related to information technology and its applications, such as E-Learning, E-Commerce, E-Government, etc.

The concept of E-Government emerges from the idea of transforming the government department’s work to the use of IT applications and communication to improve their performance and provide effective and efficient services to citizens and different business sectors.

2. RESEARCH PROBLEM

The problem faced in this research is centered around the impact of the information revolution, with all its various applications, including the Internet, on daily activities in the Kurdistan region of Iraq. The issue is studying what we expect from the growing influence on the activities practiced within the institutions of the region government through the study of the relationship between the availability of basic implementation of E-Government project and the success of the project.

3. RESEARCH OBJECTIVES

The research aims to provide a theoretical framework for the following:

- The concept of E-Government.
- Elements of E-Government system.
- Substrates and requirements for the transition to electronic government
- Positive and negative aspects of E-Government
- The challenges faced when applying it
- Presenting recommendations to reach a positive transition

4. RESEARCH METHODS

The research depends on the analytical methods to define the concept of E-Government and to determine the advantages and disadvantages of the system as well as the
challenges faced when applying it in the Kurdistan region of Iraq through the Survey carried out by the researcher through a personal interview with more than 200 persons of staff member of government departments and institutions in the region.

5. CONCEPT OF E-GOVERNMENT

The concept of E-government emerged at the beginning of 1996 in central Florida to apply some concepts and techniques in its departments, but the official birth of this concept came in the beginning of 2001 during a specialized conference held in Italy, which contributed to the growth of the idea of the digital government, helping it spread remarkably.

The term Government is simply defined as a set of institutions that assume responsibility of management and administration of public affairs in a particular community, while the term E-Government means the investment of information and communications technologies in developing and improving the delivery and administration of activities and services of the official government, both between government institutions themselves and then called idiomatically (G2G) or between these institutions and their clients, whether they are employees of institution (G2E) or outside (G2C). The idea is to provide information technology and communication tools to assist in this area, especially the technology of the Internet, Intranet, and extranet, and, in accordance with security considerations, to protect the beneficiary and the service provider to ensure the development of performance of the government.

Under this definition, we can summarize the e-government activities and services in three categories:-

- Advertising activities and services category. The activities relating to the dissemination of data and information to users (citizens) on electronic sites designed and published on the Internet to help in spreading awareness for these citizens about the regulations, instructions and laws of the government institution concerned. For example, the Income Tax Department published instructions for the tax law on its website on the Internet.

- Procedural activities and services category. The services and activities that facilitate users activities by which they interact with E-Government website in order to start implementing a certain activity provided through the website. For example, a user may use a special form to fill out the information necessary for the Income Tax foundation in order to calculate the taxes he or she owes or to fill out an application to apply for Universities in Kurdistan region through the website of the Ministry of Higher Education.

- Operational activities and services category. The services that enable the users to implement a particular transaction through the website, such as paying the electricity bill to the region electricity company or paying tax merits to income tax foundation (after filling out a special form published on the foundation’s website, using a credit card issued by a given bank). This will enable them to pay their financial receivables and expands the circle of digital services by inserting the public and private banking sectors into the structure of the E-Government, with the concept of electronic payment.

6. E-GOVERNMENT OBJECTIVES

The general concept of the E-Government activities and services leads us to determine the following goals and basic features of this government:

- Staying aware of the new technology of the information age to serve the interests of citizens and facilitate procedures of government foundations and non-governmental organizations.

- Centrality of performance, to achieve greater administrative and security control in order to ensure the speed, security, confidentiality and regularity of the procedures and the flow of information by aggregating all activities at one electronic site.

- Provide a suitable environment for supporting the economic growth by applying the concept of e-commerce in its various aspects (sales, purchasing, advertising, auctions, etc)

- To create better opportunities for complementary performance between the various units and government institutions (and non-governmental, if possible) by restructuring the business world and developing new methods of implementing the tasks to make them more effective.

- Provision of services and information for all, regardless of where they are (openness and spread)

- Raising and developing the performance level of human resources.

- Reduce the time, effort, and cost of doing business.

7. E-GOVERNMENT ADVANTAGES

Those who study the experiences of many of the leading countries transitioning towards e-government can conclude that these experiments were able to verify a lot of advantages in many vital areas, including:

a. Economical advantages:

- Saving money, time, and effort for all parties in the economic process through offering the commodity to the customer

- Supporting economic development programs by facilitating economic transactions between
government and private sectors, which will inevitably lead to increasing returns to e-government

- Provide job opportunities in new areas, such as data entry, programming, follow-up information security, operating and maintenance of electronic infrastructure, etc.
- Unify the efforts of all parties of the economic process, through a single portal, instead of dispersing efforts and duplicating some of the procedures, as it happens in the traditional government
- Open new investment channels, through the integration between e-government and e-commerce applications (E-Commerce), using the same techniques, applications, and sharing data between them
- Positive use of the human capabilities by moving these capabilities and re-using them in other locations within the electronic environment, which will help in productive activities and fields

b. Administrative Advantages

- Eliminating bureaucracy and the routines of traditional government
- Improving the functionality and organization of work through applying concepts of Electronic Management (E-Management)
- Achieving the principle of transparency by the abolition of patronage and courtesy and mediation
- Curtailmenting the long serial administrative pyramid in the traditional government, which will help to overcome the routine and shorten the implementation of administrative procedures
- Helping the organization and implementation of new business rules and creating a work environment based on the principle of unifying efforts by working as one team (Team Work)

c. Social Advantages

- Facilitating and speeding up social communication through electronic applications such as e-mails and some social communicating sites, like Face book and twitter
- Activating the various social activities through some IT applications, like conferences and meetings via computer networks (video conference)
- Sharing in building a civilized society able to understand and internalize the new technology and deal with them to serve the interests of the community and raise up the level of its performance (building an information society)

All experiences must have some negatives that come along with the positives, even at the beginning. And so, with this in mind, we see that the dependence on electronic devices in performing a lot of human life activities can lead to the emergence of some disadvantages, which can include:

a. Unemployment

Although new job opportunities can be provided by information technology and computer science, these opportunities are limited, technical in nature and include a private group of only qualified candidates. This leads to the creation of problems in the labor market in many disciplines, including relying on the state and the private sector to absorb surplus labor employment. The issue comes with those that are not prepared for rehabilitation because of habits and behaviors they have mastered in the conventional working systems

b. Social Disintegration

The dependence on the implementation of activities through cyberspace, where the communication by default is performed through the computer screens and not through the interaction of spatial real, will inevitably lead to the creation of jobs performed from their homes, which reduces the chances of contact. There becomes a loss of a significant part of the social relations that typically arise in public places, during shopping, education, work, etc.

c. Loss of Privacy

The presence of linked distributed databases containing a large amount of information about members of the community and state institutions within the various areas (personal, social, behavioral, financial,... etc) may expose them to the risk of penetrating the privacy of this information, in a world of growing number of hackers and pirates of computer networks

d. Loss of Safety

The completion of transactions, especially cash payments made by the citizens through the gates of e-government may raise suspicion and doubt of the success and recording operations. When a person pays the electricity bill electronically they get a voice or electronic message showing payment, which may not be considered an official document when compared to a receipt received upon payment directly (face to face) to the Department.

9. PILLARS OF E-GOVERNMENT

The process of switching to e-government is a complex task because of the conditions and requirements to be completed and linked to various areas of government activities and sectors of business and community life. The leading countries’ experiments in e-government prove that, in order to have an e-government which can achieve its goals, it must be constructed according to the following basic pillars: -

- Starting of the current reality characteristics. The real experiments have shown that the most successful countries are those that
possess the elements necessary for the conversion to e-government and possess specific criteria such as administration and social development and human and economic capabilities. On the other hand, the less successful countries are those that were guided to technological competitions without considering these criteria into account.

- Having a clear national vision for the paths which will lead to e-government, through the development of realistic plans which employ efforts in achieving a paradigm shift in the procedures of completing the government activities, and organizing priorities in the framework of integrated programs achieved through broad participation which is based on the principle of specialized accomplishment.

- Expand the base of participation. Different parties must be involved, intensify efforts, and mobilize the resources. Strengthening the basis for cooperation and integration between these parties to carry out their duties and obligations in adopting the initiative of e-transformation as stated in the national plans and programs is an important step. Also, they must not forget the importance of the private sector as a main and active partner in creating the appropriate climate in the transition to e-government.

- Preparing financial and human resources necessary for the transformation process. This can be achieved through project financing needed for securing the necessary infrastructure for the transition process, mobilizing the resources needed to build the human capacity, and training them as preparation for the transition process.

- Seek to group all of the informatics activities and services in one place, such as the government official site on the Internet or within a public government information network.

- Provide the ability of continuous communication with citizens (24 hours/day, 7 days/week, 365/a year). With the ability to meet all needs and informative service to the citizens, achieve the speed and effectiveness of the liaison, and accomplish coordination and performance between the government departments themselves and each of them separately.

- The importance of organizing and coordinating the efforts and capabilities and focus on the specialization principle and distribution of responsibilities. Achieving successful adoption steps in development digital informational projects cannot be done in the absence of regulation and institutional work. This ensures the continuity of raising the level and effectiveness of activities and the speed of their completion, because the work outside of this framework will lead to randomness. Therefore, attention must be given to the organizational and institutional component in bearing responsibilities within an organizational relationship in which responsibilities of all institutions and ministries are determined.

In spite of these general pillars, it must be pointed out that it is not possible to absolutely copy the experiences of others if we wanted a successful experiment in the region. The requirements depend on the characteristics of a country or region, the size and attributes of the infrastructure, the culture of the community, the capabilities of its citizens, the structure of the traditional government, and the methods in performing the functions. However, this does not prevent the need for taking into account the experiences of others who have proceeded in this area because it offers lessons which will help in building a special model of E-Government in the Kurdistan region of Iraq.

10. PRELIMINARIES OF TRANSITION TO E-GOVERNMENT

Transformation to applying e-government in its comprehensive concept in any country, including the Kurdistan region of Iraq requires the creation of an appropriate atmosphere for this transition. They must provide a set of technical, organizational, administrative, legal, and human resource requirements necessary for the process of transformation before starting the actual implementation of the Kurdistan e-government. The most important requirements are as follows:

a. Expansion In The Use Of Computers In All Areas Of Life In The Region

The transition to the use of computers in business and delivery of government services by using electronic media coincides with the expansion of the acquisition and use of computers (quality and quantity) by citizens and businesses. This will develop the skills of individuals and will provide the appropriate groundwork required to make the move towards building the e-government.

b. Administrative Development And Institutional Organization Of The Government

Making a transformation to an electronic administration is what is necessary to overcome traditional management ballasts, introduce informed government departments, and to absorb and use digital technology. It is not possible to believe in the use of modern automation systems to conduct businesses and government activities while also maintaining the traditional sterile systems and methods of administration process. We must prepare all government institutions to work as one system and share in achieving the integrated tasks and coordinated actions by establishing the rule of competence, compatibility, and harmony in the relationship between these institutions.

c. Expansion In Information Networks

The emergence and spread of information networks, especially the Internet, and using them as an integrated environment in the implementation and management of different levels of the automated information systems for the spread and exchange of huge quantities of information, and deliver them to distant places at different times, forms the real start of the electronic requirements necessary to move to Kurdistan E-Government. So It is natural to find that the
successes of the transformation towards E-Government have been confined to those countries that have progressed in the establishment of a wide array of information networks (global and local) and The Internet has become an essential part of daily life and a means to the implementation of key functions and activities of individuals and governmental institutions and various business sectors.

d. Provide an Efficient Communication Means In The Region

Communication has become an increasingly important element in the structure of data and electronic services transmission and exchange systems. The presence of a large and rapid communication network in all areas of population and business sectors will undoubtedly help in the success of all attempts to transform into E-Government.

e. The Presence of Integrated and Effective Information Systems

The information represents the main foundation upon which the E-Government electronic systems and application services can be built. These applications cannot be accomplished without knowing the information necessary to identify these services, what quality of services is required, and coordinating the implementation of procedures and transactions and fulfillment of mutual obligations with the necessary of submitting these services in the required level in order to assist in the decision-making process and business administration in various government agencies.

Providing automated information systems that are characterized by very high capability in producing, processing, storing, and retrieving of information will help in the process of transition to E-Government. Automated information systems will provide the possibility of implementing automated procedures and transactions, which will facilitate the delivery of government services by electronic media.

f. The Presence of Appropriate Legal Environment

In general, the transition to a new style of organization of the State sectors and society will inevitably lead to substantial changes in the nature and form of relationships and mutual commitments between customers. This requires the organization of the relationships through appropriate legal rules and systems which will enable the implementation of these automated procedures, define the rules of completed transactions, and instill confidence to guarantee the rights that will arise due to electronic trading and ensure the security and privacy of all parties in the transactions.

Therefore, any development towards E-Government in Kurdistan region should be connected to finding solutions to the legal problems first by issuing legislation that guarantees the rights of all parties and ensuring the legality of automated procedures and the protection of privacy and ensuring the security of information that is exchanged over networks.

g. The Existence of Appropriate Electronic Payment Systems

Spending on provisions or obtain the services through E-Government, whether free or for a price, requires the existence of appropriate systems to manage financial and banking transactions for these services, and Because the work of E-Government system depends on the principle of dealing from a distance, the payment transactions and the payment of exchanged benefits between dealer must be done remotely. Also, it requires the existence of electronic financial and cash payment systems at various state sectors as an initial step towards E-Government and to establish awareness of the banking issues in the social milieu of the region.

h. The Existence of Organized And Understanding Private Sector

Because of the importance of the private sector in the equation of E-Government and its effective role in the process of economic development and exchange of services with government sectors, there should be an appropriate level of organization, sophistication, and understanding of its role in the economic process and It should use with reasonable degree of information technology applications in various activities so as to enable the exchange of information and to participate effectively in the activities of E-Government.

i. Availability of Human Resources

Obtaining the techniques of information technology is not difficult as long as someone is able to pay the price to obtain them, but these techniques alone are not enough without the availability of human resources. It is necessary to employ people that are qualified and trained to deal with the technology by increasing public awareness to help them believe in the usefulness of this transformation and at the same time to help live and deal with this new environment.

The humanitarian aspect of the process of switching to e-government requires the following:

- Convincing the various administrative levels (and higher in particular) in public and private sectors of the importance of this transformation and removal of all the fears of these new technologies so that there are no obstacle in the way of this development.
- Educate and train employees in the government sectors to understand and use new technology through the establishment of training programs and to ensure favorable qualified workers in this area.
- Creating awareness programs and counseling for the local community on how to deal with the new environment and how to accomplish the benefits of the transition to the new environment.

11. TRANSITION STAGES TO E-GOVERNMENT

The achievement of e-government must be done in several stages (phases) takes into account the privacy of the
Kurdistan region and what has been accomplished from the elements and infrastructure that support the required transformation.

**Phase I: E-transformation (Transmission)**

Transition from the traditional activities of state institutions to digital activities that can be achieved through:

- Administrative and structural modernization in various government institutions such as goals, managerial divisions, tasks, administrative links, Institutional Relations which represents the key factors in influencing and being influenced by the use of modern technology effectively.
- Create legal and regulatory frameworks required to move to electronic trading community (information society), these frameworks must keep in mind the duties, rights, and obligations of all institutions and the various parties’ issues of freedom of expression and security and to ensure trust undertake the activities of E-Business through using alternative methods to resolve many of the major disputes in judicial proceedings.
- Building integrated information systems and using IT tools which will facilitate the automation of business and activities of the various ministries, authorities, and government institutions.

**Phase II: Interaction**

Building networks systems to exchange the information and electronic services in various fields between government institutions.

**Phase III: transaction**

Help the citizens to deal with government information networks to achieve and disseminate models of how they can get the services they need through the government institutions portal.

**Phase IV: Integration**

Predisposing and working to achieve integration between various systems and applications used by government institutions to provide electronic services, transactions to the citizens and business sectors

This will requires work on the establishment of a unified portal for all e-government institutions through which citizen can have access to the information that help identifying the services provided electronically and then execute the transactions related to access the required services.

12. REALITY AND CHALLENGES OF THE TRANSITION TO E-GOVERNMENT

Reviewing what we presented about e-government and take a look and identify the reality of the situation in the Kurdistan region of Iraq, we can highlight many challenges that will face the transition to Kurdistan e-government at the current stage, particularly:

- Poor infrastructure and limited economic resources in the region, and their implications for the priorities of development plans and programs appropriate to accommodate the variables of the new information age
- The Traditional and complex governmental management systems, because the use of information systems without real development in the administrative systems will lead to the inability to take advantage of these systems to improve performance.
- obvious weakness in the internal institutional and structural construction of the administrative units concerned with Informatics in the various government institutions,
- poor technical architecture of the information units to be able to transition to the use of computerized systems and applications, as well as lacking in many institutions to technical expertise in the field of information technology
- Significant weaknesses in the infrastructure of information network which can provide secure informational exchange services between the various bodies and institutions and cover a wide range of activities in the region cities and rural areas
- The nature of economic and social situation of the region and the limited number of people in the society who are able to use the computer that will create other challenges facing the development of informatics in the region and reduce the possibility to be utilized in serving the Society.
- The lack of legal references that govern the work in the field of information and reinforce mutual rights in electronic trading
- High rate of illiteracy in the skills of computer use among workers in the various institutions and the little number of specialized technical persons qualified to work in informatics area Along with the low level of training and rehabilitation which carry out annually for the staff who works in information technology area
- The poor policies and strategies in effective learning in the field of information technology at different levels of general, technical, and higher education.
- scarcity of the use of computerized systems and applications in information management and business activities automation that are performed by the majority of institutions, and rely on the manual systems which are not able to provide information needed by decision makers and others in the form and type and time they need, which reduces their ability to make use from the information provided.
- The absence of technical standards for the quality specification in building information technology applications and the activities of production, processing and exchanging information, which will then lead to the
incompatibility in building information systems and the high costs of creating or obtaining them, and the difficulty of achieving the integration required to develop the work of government institutions in the future

- Low levels of awareness of the culture of information and knowledge among the community and the low level of use of information technology among the population

13. PIONEER EXPERIMENTS

According to the 2012 United Nations E-government Survey rankings, the Republic of Korea is the world leader (0.9283) followed by the Netherlands (0.9125), the United Kingdom (0.8960) and Denmark (0.8889), with the United States, Canada, France, Norway, Singapore and Sweden close behind.

The survey was prepared in a context of multiple challenges of an open, responsive and collaborative government for the people. The report examines the institutional framework for e-government and finds that the presence of a national coordinating authority can help overcome internal barriers and focus minds on integrated responses to citizen concerns – an important lesson for sustainable development actors. The Survey also argues that e-government provides administrators with powerful tools for grappling with problems of social equity and the digital divide. The caveat is that governments must find effective channels of communication that fit national circumstances while also taking steps to increase usage of online and mobile services in order to realize their full benefit to citizens. So it will be useful to shed light (shortly) on some of the pioneer experiences of the others in this area without forgetting the principle of none cloning which we have referred to because of the differences between communities

a. South Korea

After laying the foundation for e-Government, including the creation of the National Basic Information System (NBIS) in the 1980s and after reformation of applicable laws and institutions in the 1990s, the Korean government implemented e-Government as a major national program for the 2000s.

It concentrated on 11 major tasks for e-Government and 31 major tasks for the e-Government roadmap. As a result, e-Government has become firmly established in all areas of the Korean government.

The Korean government establishes a national informatics master plan every five years for the efficient and systematic promotion of national informatics. The 4th National Informatics Master Plan (2008–2012)setsthe vision of national informatics for the following five years as “Establishing an Advanced Knowledge Information Society Based on Creativity and Trust.”

Korea’s e-Government has produced the following visible results:

- The efficiency and transparency of administrative work has significantly improved;
- Administrative civil services have been greatly enhanced;
- Opportunities for people to participate in the policy make process have been expanded.

Accordingly, the effectiveness of the e-Government of Korea is widely recognized by the international community, and various e-Government systems are being exported to foreign countries.

With the goal of converging the e-Government services with advanced IT technology until 2015, the Korean government now aims to implement ‘Smart Government,’ through which citizens may enjoy easy and free access to government services regardless of different channels of delivery. Accordingly, Korea will be able to tackle its social problems of low birthrates and the aging society, while actively responding to future issues of social security and public welfare.

b. United Arab Emirates (UAE)

The Global Information Technology Report issued by the World Economic Forum in 2011 indicate that the UAE occupies the ranked 24th globally and the first among Arab countries in investing in information technology and communications sector, where the volume of spending on this sector to 6.1 billion US dollars in 2011.

The transition to E-Services in UAE began in 2001 when the Ministry of Finance launched the E-Dirham (Dirham: is the monetary unit UAE) as a new service in collecting the fees for government services from citizens rather than the traditional method.

In 2003, IBM was commissioned to conduct an evaluation study of the federal institutions for the development of their executive plans in the field of e-transformation

In 2004, the government signed an agreement with the Federal Telecommunications Company to provide the infrastructure necessary to start the e-government project. The UAE, according to the study prepared by the Cisco (2010) one of the top ten countries in the field of providing the infrastructure for electronic transitions

And In 2005, the electronic portal for Emirates e-government was launched.

In 2008, the General Authority for regulating the telecommunications sector, develop information systems strategy for UAE e-government based on the following three-dimensions:

- Environment: data about current situation such as applications, communication systems and laws currently applied
- Readiness: This dimension focuses on the capabilities of the government in terms of technical and organizational issues

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- **Usage**: Type of service that is exchanged with customers

At the same time they identified five goals for the e-government project related to these three dimensions:

a. Raise the level of maturity of e-government bodies (environment dimension)
b. Building infrastructure and shared applications to increase cooperation between the government agencies and reduce costs (readiness)
c. Standardization of processes and activities of government and promotion of qualified human cadres (readiness)
d. Improve the competitiveness of the state in the field of e-government (readiness)
e. Raise the level of e-transformation in the field of information services (usage dimension)

The e-government and periodically set up workshops and training courses for state employees on cloud services and Guidelines on how to use social networking tools, which was established in 2011 in order to achieve a secure and effective communication with all customers, and involve them in decision-making process

14. RESULTS AND RECOMMENDATIONS

Depending on the discussions and inquiries conducted by the researcher with a group of staff members of the government institutions of the region, the researcher reached through what they posed of views on the subject of the transition to e-government in the region, the researcher reaches to the following results recommendations

a. Results

Depending on the theoretical framework for the research and study of the reality around us and developments in the era of the digital economy through which the peoples and nations are passing, the following conclusions can be drawn:

a. The Government of the Kurdistan region of Iraq Cannot ignores the next Revolution in the field of electronic services and strives to serve the citizens of the region by the provision of services through e-government portal
b. applying the E-Government concepts of the Kurdistan Region and through the experiments of whom start before us in this area will inevitably raise the level of government services and reduces administrative complexity and the cost of the program achievement and achieve the desired satisfaction of the region citizens.

c. The region government must not import readymade templates for e-government and try to apply them directly because of differences in conditions and components, customs, traditions and culture between environments

d. Accompanies the transformation to electronic government (like social, economic and political phenomena’s) some advantages and disadvantages, must be dealt with them with great caution in order to increase the advantages and reduce the disadvantages effects of the transformation process

e. It is important for region government to accept the challenges of the transformation to e-government with all its disadvantages Because of the association with Information and electronic invasion in all areas of life and on the basis that “it is a necessary evil”

f. E-government wherever it is, it is not just a transformation in the style of service delivery and the system of government work to the electronic system only, but it is interrelated and complex system need an extended and conscious studies for all elements of the system before transforming to the automation of services and procedures

g. One of the main obstacles faced the researcher which is one of the basic pillars for the development of future plans relating to the transforming towards e-government is the lack of statistical data related to the Foundations of e-transformation and poor information awareness to the employees of government institutions, but in many cases, Absence of attention to these aspects in most of these government institutions, which constitutes a major obstacle in the process of transformation sought by the region government

b. Recommendations

In the light of previous results and having examined the experiences of countries that have adopted the concepts and foundations of electronic government, researchers can present the following recommendations:

a. the region government Should be directed towards the development of policies and plans aimed at creating an electronic environment appropriate to the process of transition towards e-government that is Takes into account the following elements in these plans and policies and seek to follow-up and documented to be a good reference for researchers in this field

b. spreading of information networks between government institutions with the need to focus on the Internet to form an integrated environment in the management and operation of the various levels of automated information systems and the achievement of the dissemination and exchange of information in various forms and sizes in order to deliver them to the users and stakeholders in their different places and divergent

c. Development and improvement of the communication systems in the region through the use of newest and most efficient systems and deployed in all locations of the presence of population and allows the possibility of transfer and exchange of information with high
efficiency and low costs specially for the ordinary citizen
d. because the information from the base core for the systems and applications of e-government services, we have to strive to build an integrated and effective information systems and define the available and needed services and coordinate the implementation of procedures and transactions and fulfillment of mutual obligations
e. The need for the region government to provide support and facilities that encourage the private sector have an appropriate level of organization of administrative and institutional framework, and uses the techniques of information technology in its activities and have automated information systems enables it to exchange information and participate in the applying electronic procedures and transactions in order to secure its contribution to the establishment of the e-government's program, that is because of the importance of this sector in the process of economic development and its role in the exchange of services with government institutions and the provision of consumer and service needs for citizens

f. Must seek the provincial government alleged adopt a set of laws and legislation governing the relationship between the parties dealing in e-government environment and ensure their rights and protect their privacy in line with the new methods of transactions between all parties, both governmental and non-governmental
g. Since the procedures of the e-government requires to be implemented through electronic media and dealing from a distance, the payment transactions and the payment of benefits exchanged between dealers must be achieved form distance also, that’s requires an electronic payment systems, managed to do all the financial and cash operations needed to complete the electronic transactions within rules which ensure the rights of all deal parties taking into account that the success of the dissemination of this type of payment systems cannot be achieved without the presence of an effective banking system which can accommodate new technology and the consolidation of banking awareness among social circles in the region

h. The experiment of e-government cannot succeed without the attention to the human element as one of the most important factors of the infrastructure for any electronic system. For that, to those who in charge of e-government project in the region must give attention to the following human aspects:

a) It is important to convince senior management in government sectors for the importance and usefulness of the transition to e-government

b) Prepare an extensive training program to train employees in the government sectors on the use of new technologies related to the new environment
c) Develop a strategic plan in which all the governmental and non-governmental agencies and organizations contribute in it in order to educate the citizens of the region and train them on how to deal with the new environment and the feasibility of using it in completing their transactions
d) Seeking to prepare ambitious plans for the preparation of administrative and technical staff to ensure the success of the project and its continuity and try to involve region universities and research institutions in the Participation of these plans
e) encourage scientific researches in the development of electronic trading systems related to the new environment

i. Through the review of the researcher for the experiences of many countries both in the Middle East or countries which is considered a pioneer in the field of e-government, and for the success of the Kurdistan E-Government, the government must seek to establish a specialized institution responsible with the administration, follow-up and supervision the project such as the national information center in the Jordanian experience and Telecommunications Regulatory Authority in UAE experience

j. In order to facilitate the interaction of citizens with available E-Government activities of the Kurdistan region of Iraq, researcher found that there is a need to provide a unified portal contains the portals of all government institutions to facilitate the access of the citizens to the required service

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