The Challenges of Adopting E-Governance in Iraq

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Abstract

One of the most important technology applications to monitor the effectiveness of e-government services in the current era is e-governance. E-governance monitors the quality of government services, the exchange of information, and the efficiency of institutional communications within the digital environment. The current paper aims to analyze the main challenges faced by adopting e-governance in Iraq as a developing country by analyzing the organization's potential strengths and possible weaknesses in addition to the opportunities and threats for adopting e-governance through using SWOT (Strengths, Weaknesses, Opportunities, and Threats analysis), and to evaluate main four aspects (politic, society, economy, and technology) of adopting the e-governance in digital environment through using PEST (Political, Economic, Socio-cultural and Technological analysis). The researchers find that the governmental organizations in Iraq are using the services of the Internet such as websites, social media site, and blogs to supply citizens with governmental services, but there is a huge gap among the four different aspects. The researchers conclude that the weaknesses of the e-governance applications adopted in Iraq should be recognized, the current threats must be eliminated, and practical solutions should be found to reduce the gap among the four aspects.

Introduction

The tremendous development of communication technologies and the digital exchange of information have helped the development of institutional communication and enhanced the orderly storage of data and increased the efficiency of feedback,

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which led government organizations to provide their services electronically in order to reduce cost and increase speed in order to regularize services and raise the level of customer satisfaction.

The fundamental benefits of using digital environment tools have been transformed from data-processing tools accurately and rapidly to tools for data classification and information analysis to rationalize decision making in the organization.

The growth of Internet connectivity and cloud computing help citizens to modify their actions to be suitable for this technological development in order to obtain the highest level of facilities provided by the digital environment.

The adoption of digital environment by the government to provide its services contributed to the emergence of e-governance in order to instill confidence in electronic transactions, deepen the interdependence between citizens and governmental organizations, and participate in decision-making.

The term of e-governance is basically the application of electronic environment tools to control the performance of e-government in a simple, ethical, accountable and transparent manner to achieve the smart government.

The adopting of E-governance in developing countries such Iraq can be the main problem of this research due to the many challenges which can face it. So the main objective of the research is analyzing the main challenges faced by adopting e-governance in Iraq as a developing country using the organization's potential strengths and possible weaknesses in addition to the opportunities and threats for adopting e-governance through using SWOT, in addition to evaluate main four aspects (politic, society, economy, and technology) of adopting the e-governance in digital environment through using PEST.

E-Governance Concept
Governance, in general, is the administration activity which relates to the decisions that determine expectations, grant of authority, or verify of the performance, in other words, it strengthens the control of the activity of the organization and follows up the level of performance of provided services and increases the participation of citizens in monitoring the performance of the governmental organizations.[1]

So, governance varies according to the various types of organizations depending on the following conditions[2]:
• Small governmental organization: the duty of governance can be receiving data, ensuring

Table 1: The Analyzing of the Political Aspect by SWOT

Strengths	• Combination with democratization reforms • Internet as pull factor • Modern image
Weaknesses	• Budget • Cyber laws not available • No problem owner within government • No expertise about technology • Slow decision making process • Hierarchy in organizations • Short term approach due to elections • Integration and reform
Opportunities	• Raise external funding • Show competitive edge • Transparency causes natural change of processes • Reinvent government
Threats	• Bureaucracy • Piracy, misuse • Corruption • Maintaining disorder, no transparency • Political instability • Resistance

its clearness, and ensuring its accuracy.

- Local organization: the duty of governance can be assessing the link between the administration of the organization and the employees.
- Big organization: the duty of governance can be showing the level of accountability to stakeholders and citizens.

So, the term of e-governance can be explained as the presentation of traditional governance through the electronic environment to organize data, show it rapidly and in clear shape, and perform the governmental actions well.[3]

UNESCO argues that e-governance can engage novel kinds of leadership, modern styles of investigations, new methods of decision making, novel tools to enhance the management education, and fresh ways to arrange data.[4]

The European Council introduces three areas to use e-governance in public activities[5]:

- The relationships between the internal environment of the organization and its external environment.
- The achievement of e-democracy by

managing the internal environment of the organization at all levels of internal activities
- The management control of public services electronically

E-Governance Stages

However, modern technologies have been available in Iraq recently, especially after the liberalization of the Iraqi economy in the early 21st century. The adoption of e-governance has started in the following stages[6]:

- Computerization: In the first stage a big amount of governmental offices got prepared with computers and electrical systems. The using of these systems started with word processing, rapidly followed by information processing.
- Networking: Some departments of a little government organizations got linked throughout a hub which leads to distribute and share of data and flow of information among various government departments.
- On-line attendance: With the raising of Internet connectivity, a request was suffered for keeping an attendance on the web. This created a keeping of websites by government units and other departments. Basically, these

Table 2: The Analyzing of the Social Aspect by SWOT

Strengths	• People eager to learn • IT skills • Skilled people possible export product
Weaknesses	• Basic education poor • No IT literacy • Low literacy • Different languages • Public acceptance of • self-service models • Skill shortage
Opportunities	• Employment increases • Education system improve • People learn structural job • Cheap manpower widely available • Promotion of internet • Better healthcare
Threats	• Brain drain IT skilled people after training • Resistance of people • Digital divide • Privacy

websites included all types of data about the structure of the organization, details of contacts, publications and reports, vision and objectives statements of the individual government departments.

- Online interaction: The major development of the Internet in Iraq has had a significant impact on the enhancement of communication channels between governmental organizations and citizens. The main objective of this stage is to activate the electronic participation of citizens in managing governmental organizations through the departments of electronic complaints and the gradual transformation to provide all government services electronically.

ICT Impact on E-Governance

Information and Communication Technology (ICT) do a serious role in the rapidity of the data flow among the government and people and transforming the method in which governmental organizations and citizens work together.[15,16]

The change from the traditional environment to the electronic environment has faced many obstacles, but citizens have gradually agreed because of the large spread of information and communication technologies. Therefore, the main role of these technologies in governance can be as follows[7]:

- The improving of the products and services quality provided by the governmental organizations lately.

Fig. 1: The Analyzing of SWOT

Table 3: The Analyzing of the Economic Aspect by SWOT

Strengths	• E-Governance good argument for external funding • Transparency for businesses
Weaknesses	• Investors • Budget control
Opportunities	• Cost efficiency through e-governance • New business • More efficiency tax revenues
Threats	• Corruption

- The appearing of new governmental organizations' products and services.
- The enhancing of the citizens contributions in choosing the governmental organizations' products and services
- The qualifying of many new governmental sectors to provide their products and services electronically

E-Governance Challenges

Many challenges and obstacles are appeared in adopting e-governance in developing countries; the researchers summarized the main challenges in four

aspects, which can be shown as follows[8,9]:

- The political aspect: The prepared plan and policy, rules and laws, management, the processes of making a decision, the conditions of funding, the international affairs, and the political stability conditions.
- The social aspect: The citizen's education level, the type of employment, the amount of income, the size of the digital divide, the place of citizens (rural or cities), the level of citizens (rich or poor), literacy, and the IT skills of citizens.
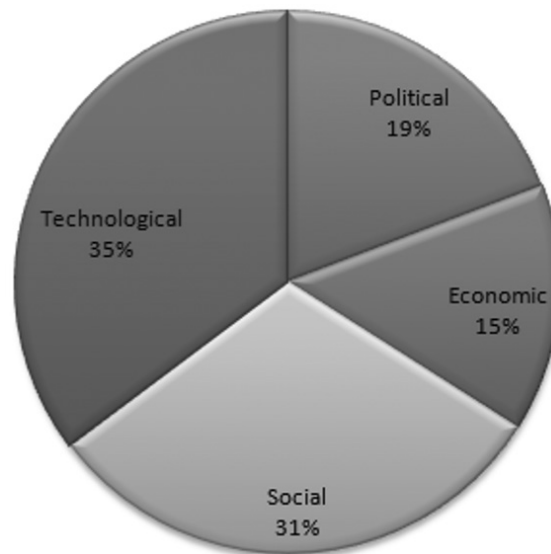- The economic aspect: The amount and

Fig. 2: The Analyzing of PEST

Table 4: The Analyzing of the Technological Aspect by SWOT

Strengths	• Everything is new • Leapfrogging possible • Internet as driving (pull) factor • Lack of IT standards
Weaknesses	• Shortage IT skilled people • High cost of internet • Heterogeneous data • Lack of IT standards • Costs of software licenses
Opportunities	• 2nd hand hardware available • Use one standard
Threats	• Dependency of technology

source of funding, the savings of cost, the models of business, the electronic commerce level in the area, and incidental results of adopting e-governance.

- The technological aspect: The technologies of software and applications, the hardware devices, the technical infrastructure of institutional communication, the IT skills employees, the services of maintenance, the conditions of safety, and the issues of security.

Successful Factors

Many spoilers exist in developing countries, so it is difficult to identify the main obstacles to position the essential aspects of e-governance in the right place. Therefore, if the plans and polices of e-governance of governmental organizations do well, all the actions, services, operations and activities of the government will do well too, but if the plans and polices of e-governance of governmental organizations don't do well, these plans and polices will cost governmental organizations huge amounts of money and valuable time.[10,14]

So, when discussing the risk of applying the e-governance solutions, the next factors should be taken into consideration[11]:

- The stability of politics.
- The trust rank in government
- The significance of the governmental identity
- The structure of the economy
- The structure of the government
- The various levels of maturity
- The constituent demand
- The infrastructure of ICT

Practical Part

The challenges of adopting e-governance are analyzed by the use of SWOT to examine the organization's potential strengths and possible weaknesses in addition to the opportunities and threats, and PEST to evaluate the main four aspects.

The Tools of SWOT Analysis

SWOT is an effective analysis to recognize the potential strengths and possible weaknesses of the organization, and the opportunities and threats. So, SWOT can be a basic frame which assesses the ability of the organization logically based on internal factors (the potential strengths and possible weaknesses), and external factors (the opportunities and threats).

So, SWOT can conclude the organization assists to achieve its goals and the organization obstacles that may reduce the achievements of the goals by the use of ecological information to evaluate the organization's position.[12,18]

The Tools of PEST Analysis

PEST is an efficient method to deal with a lot of factors that impact on the surrounding environment of the organization. So, the organization should recognize, know and understand these factors to be able to accomplishing the performance optimally. PEST classifies effected factors to four aspects[13,19]:

- The political aspect: Often, a government's foreign policy plays a vital role in the formulation of trade laws which can impact on the limits of trade or the motivations of trade, as well as the industry related laws can impact on the organization. So, PEST can analyze the economic involvement level of the governmental organizations, the impact of tax laws, the policies of client protection, the regulations of employment, the ecological law, and the work regulations.

- The economic aspect: The economic factors can impact on the organization's activities, the exchange rates can impact on the trade cost and the export volume, and the interest rates can impact on the organization's growth by its impact on the cost of the organization's capital. So, PEST can analyze the economic development indicators such as the inflation rate, the exchange rate, the interest rate, and the employment rate.

- The social aspect: The study of society can be helpful for organizations to understand the types of potential markets and the desires of possible clients, because the society is a main part of the external environment which surrounding the organization. So, PEST can analyze the different phases of culture, and demography such as the characteristics of career, the age rate of citizens, the growth rate of population, the degree of health awareness.

- The technological aspect: The rapid rate of development for the technology, and

the increasing of citizen's knowledge in new styles of technologies lead to many challenges which can be faced by the organization. So, PEST can analyze the main technology factors such as technology modifying, research and development activities, obsolescence rate, and innovation.

The Challenges of E-Governance Analyzing

In order to analyze the four aspects of the challenges faced the adopting of e-governance in Iraq, the researchers relied on the use of SWOT.

The Successful Factors of Adopting E-Governance Analyzing

In order to analyze the successful factors of adopting e-governance, the researchers collected data from many Iraqi governmental organizations which provide their services electronically. The researchers relied on the use of SWOT and PEST to analyze the data statically. Figure (1), and figure (2) show the results

Conclusion

The researchers draw many conclusions based on the results of the paper; these conclusions are:

- The main needs of adopting e-governance in Iraq must start big, adopt gradually, and evaluate continuously
- There are many effective results to reduce the impact of the four aspects which facing the adopting of e-governance in Iraq.
- The opportunities for adopting e-governance in Iraq are high due to the high level of strengths over weaknesses.
- The success factors of adopting e-governance in Iraq can be affected strongly by the external environment.
- The political regime can be reformed by adopting the e-governance in the governmental organizations, in order to maintenance the traditional norms, and social ethics.

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