

# Real E-Government, Real Convenience

M. Kargar, F. Fartash, T. Sadari, and M. Abdar-e Bakhshayesh

**Abstract**—In this paper we have suggested a new system for e-government. In this method a government can design a precise and perfect system to control people and organizations by using five major documents. These documents contain the important information of each member of a society and help all organizations to do their informatics tasks through them. This information would be available by only a national code and a secure program would support it. The suggested system can give a good awareness to the society and help it be managed correctly.

**Keywords**—E-Government, Internet, Web-Based System, Society.

## I. INTRODUCTION

INTERNET is going to be the best way for doing usual and daily jobs indoors. If all jobs could be done by using such facilities, then no one would go outdoors except for entertainment. E-business is a part of job that can play a great role in human's life [1, 2]; But this fact mustn't be forgotten that if we don't have real e-government then we cannot have real e-business.

It is government who can control both the sellers and buyers group and make an appropriate condition for them to do their financial jobs. What's more business is not the only need of people in developed or developing societies. Usually people are unhappy of wasting time because of simple jobs and also the difficulties put forward in organizations. Ministerial bureaucracy bothers people and the shortage of information they want on internet make them hopeless. Some rich people because of wrong systems get richer and poor ones grow weaker. Giving bribery to gain chances is so usual and escaping from taxes is so common. But it seems that if the government can control the system of a country electronically then all the problems will be solved.

Mas'ood Kargar is with the Department of Computer Engineering, Islamic Azad University of Tabriz Branch, Tabriz, Iran. He is also collaborating in Islamic Azad University of Tabriz Branch Computer Research Laboratories. IAUT-CRL (phone: +98-9141035597; e-mail: kargar@iaut.ac.ir).

Farzaneh Fartash is with the Department of Information Technology Engineering, International University of Chababhar (phone: +98-9141002139; e-mail: fartash@iuc.ac.ir).

Taha Sadari is with the Department of Computer Engineering, Islamic Azad University of Tabriz Branch (phone: +98-9143165992; e-mail: sadari@iaut.ac.ir).

Morteza Abdar-e Bakhshayesh is with The Information & Communication Technology Organization, Tabriz, Iran (phone: +98-9144158447; e-mail: abdar@tabrizcity.org).

## A. Terminology

Electronic Business is buying and selling, providing customer services, collaborating with business partners, and conducting electronic transactions within an organization [3]. Electronic commerce is a part of e-business, which focuses on the electronic commercial transactions between and amongst organizations and individuals. In other words, e-commerce is electronic transactions conducted by business partners [3, 4, 5].

Credit is called to the validity of banking accounts and buying rules. Market-sites can set a credit for a customer, if he is a true buyer and he can pay off the debts in the appropriate period.

E-government is a permanent commitment by government to improve the relationship between the private citizen and the public sector through enhanced, cost-effective and efficient delivery of services, information and knowledge. It is the practical realization of the best that government has to offer [6].

## B. The Problem

The overall problem addressed in this paper is:

Although e-business and e-commerce has been so popular in developed countries and is going to be popular in developing ones but again it is considered that the major potential of internet hasn't been used. Governments because of their hugeness show less flexibility against changing to be completely an electronic one. Therefore the governments cannot have control on all people at their society and can not control money transfer as it has to. Wasting so much valuable time, difficulties put forward in organizations, ministerial bureaucracy, shortage of information available about different cases in a country, giving bribery to gain chances, escaping from taxes and so many problems like that are the ones which can be solved be a real powerful e-government.

## C. Solution

In this paper we give a solution to the problem mentioned above. The government in a country can design a system to gather all information of the people in that society and divide them into five groups. All people having a national code can use these stored information in databases and do their jobs by these documents. The organizations in the country can access the data they are allowed by the system and surely they won't need more to ask the consumers to give them other soft or hard information. In this case, the government gives service to

the people and on the other hand controls them in the correct way.

#### *D. The Claim*

We claim that such a solution does exist. By allocating a national code to the members of a society they can be controlled by a government that has all the information needed from them. The electronic government helps the organizations to fulfill their need of information about the society and be influenced by the policies run by the government.

#### *E. Objective*

Using the suggested system for e-government can cause a great security and convenience in the society. The governors can control the whole system of jobs done in a country and the people can get rid of ministerial bureaucracy and unfair activities. This system can give a good awareness to the society and help it be managed correctly.

#### *F. Paper Outline*

This paper is organized in four sections. In Section 1 we started the problem, an idea solution to the problem and our claim regarding the solution. In Section 2 we present a brief survey of the previous work, their strength and weaknesses, and the areas, requiring further improvements. In Section 3 we present our work under the title of new system for E-Government and describe how the job can be done. In section 4 we speak about the benefits that are noticeable more in a society. Finally we conclude the paper in Section 5 with an evaluation of our work and some future topics of research.

### II. PREVIOUS WORK

#### *A. Why E-Government?*

Public staff in all Governmental institute & bodies should understand that their role is to deliver all sorts of services, information and knowledge to citizens in an enhanced, cost-effective and efficient way [6].

Back again to citizen rights, if they exist are they reachable in this low governmental performance? I believe that it's not only low performance problem, it's something beyond, and it's lack of efficient governance tools, which no government can overcome without using ICT [6].

#### *B. EU E-Government*

There is a European government wide strategy for e-business, which has six strands. These are to establish a brand in e-business both domestically and internationally; transform existing business; foster e-business creation and growth; expand the e-business talent pool; provide leadership in international e-business policy development; and government on-line, which should be a priority. Whilst there is evidence of government on-line e-business opportunities, the EU governments recognize that deployment of technology to increase innovation is weak [7].

#### *C. E-Consulting Web-Site*

E-consulting web-sites are designed to help customers and e-shop owners to do their buying and selling job in the right and best manner. Customers can refer to those sites to get information about the products and their prices. Experts working with those sites can help customers in deciding what is better to buy.

Some other information can be gained through e-consulting web-sites. The period of price payment is an important case informed by them. Then before choosing the products from buy-sites and reject the requests from market-sites, every one can take advantage from the experts' guidance [8].

#### *D. E-Credit in shopping*

By having a bank account in any bank, in any kind, every one can produce an electronic credit and do his buying through it, with no need to any international or at least national cards or special accounts. He can refer to an e-shop and buy all the objects he needs in one time and pay for them alternatively. The period of time for paying is agreed by both groups and the products are bought from different buy-sites. Using the e-credit helps people to reach what they want easily and the limitations avoid buying objects using checks that we will never be able to pay for them [9].

### III. A NEW SYSTEM FOR E-GOVERNMENT

Every one in his city or country should have five major documents: Historical, Medical, Political, Study-stage, Job-stage. All the information about each person can be mentioned in these five documents.

#### *A. Five Documents*

In historical document, name of all his near family and the information about his birth, marriage, nationality, religion, the places he has colonized and his new address and telephone numbers should be noted. This document may contain the thumbnail and the pictures of the person from different views and it should be updated every five years. The old pictures may be kept in another memory to be checked when it is needed.

In medical document, the information about his illnesses, medicines he has taken and the physicians visited him, and also information about his insurance should be noted.

In the political document, there are the information about his history that if he has been imprisoned or he has been called to the court or not. If one may want to attend in an election he may use this document.

The study-stage document shows that how much and where one has been attended the school and university classes. It also can include all the information about one's scientific activities. The name of teachers, courses and grades should be noted completely.

The job-stage document includes the name of places he has been worked for and the jobs he has done and also the amount of money he earns. The skills that one has in doing may be

noted there. All the banking information of a person should be noted there in his job-stage document.

#### B. Data Storage

These documents should be stored in the database of somewhere such as ministry of information to give services to the organizations in all over the country. Of-course the availability to the information is so important that should be considered in designing the web-based programs. Each person is known with a nationality code that he has from the time he was born and it is exclusive in that country. A password should be accompanied with that code to verify its security and originality.

The organizations in connection with the people may ask them to enter their code and password and get access to the information they need. The program doesn't let them know what they shouldn't. For example, while registering to a university, the responsible of registering mustn't know that if I have enough money to pay or not. He just can see the courses I have passed before and let me attend a higher class. On the other hand the payment responsible of the university mustn't see the courses I have failed or passed. Therefore the web-based programs should be designed very carefully.

#### C. New Model in E-Business

There are four major strategies in e-business: B2B, C2B, B2C and C2C. Some more strategies are mentioned in books and articles which are not noted here [10, 11, 12]. Buying products from an e-shop is considered in B2C strategy [13, 14], in which consumers and business workers are in contact with each other.

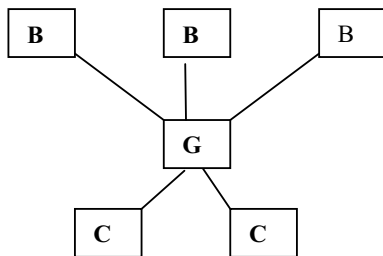


Fig. 1 B2G2C model

B2E2C strategy is a new model presented in [8]. Using the new system for e-government leads us to reach to a new model in which consumers are in connection with government and the government is in connection with business owners. Then we can consider this model as B2G2C strategy. By this model the style of communication between buyers and sellers may also change. The document used in this model is the job-stage document.

#### IV. THE BENEFITS OF THE METHOD

The basic programming rule for an e-government can have a deep influence on the society and people and also the government. It can make the jobs easier, cheaper, faster, and more precise. While emitting the paper based bureaucracy at organizations it will have benefits to the nature either. However some major considerable points are described below as benefits to the society.

##### A. Tax

Usually great millionaires have different bank accounts and also they earn money from different places. It is sometimes in a case that governors themselves can't get aware of it. By using the e-government system according to the suggested method, government can control all people and have information about their earned money. Then the government can receive the taxes on time from the accounts noted in each ones job-stage document and can govern the country much better. The cost of this electronic can be achieved by the taxes gained.

##### B. Bribery

If every is done computer-based and there is no physical visits between job owners, then no one can do his job by paying bribery and every thing can be done according to the rules planed at the system.

##### C. Cash Elimination

While using internet in all organizations and centers then it can be thought that cash becomes useless. While paying for a case, the responsible can easily click on the payment; the system would know that how much it should take from the consumer's bank account and add to the account of the organization. For cheap and simple cases such as taxi or metro, the electronic handbags can be much useful.

##### D. Employing Application

When an organization wants to employ a worker then he just need to ask the system to introduce him the people who have special abilities to do that task. They can check the political document to know if he has done any thing illegal or not. People themselves can ask the system to find a job according to the information of his study-stage and job-stage document. The system itself can consider his skills, studies and address and suggest him a job.

##### E. Registration

While registration to a company or organization, the responsible doesn't need to ask him to bring his degree certificate or some other things such as photos. The system would give him the information or photos he needs. Then instead of filling empty forms and memorizing so many codes, every one can so registration just by giving two codes.

##### F. Doctor Visit, Getting Drugs and Doing Surgery

When a person goes to the doctor's office, he says his code and the doctor can see all his medical history. The doctor

visits the patient and adds the new prescription to the system. The patient goes to the drugstore and enters his code. Then the responsible there can read the correct name of drugs and give them to the patient without having any problem with handwriting or misprinting.

#### G. E-credit

Customers can go to great shops and buy every thing he wants. Then he can pay all of the cost or ask the seller to get the payment by e-credit. Then the supplier can enter his name to the system and gain his debt gradually from the system. System itself takes money from the customers account and settles it to the organizations account periodically according to the agreement.

#### H. Bank Loan

In an electronic system all the banks have relation with each other and they all help each other in their electronic transactions. If a person needs to get loan from a bank, he may ask it to check his job-stage document and get information about his financial state. Then the bank can easily settle his desired money to his account and without getting any credits directly, solve his problem and of-course take advantage from his customer.

#### I. Postal Service

It is possible that so many objects come to the post office but they never reach to their owners. Mostly this is when the addresses are not correct or the people have left the place they were before. By the suggested system, the only thing needed at the post office is the name of owner with his national code. If they are compatible with each other then the responsible at the office would only check his historical document and find his new address as well.

### V. CONCLUSION

Filing the empty forms, taking care of different certificates and transferring them with ourselves may make us feel inconvenience while doing a ministerial job. Internet has brought us a condition that we can almost do most of our jobs easily using it. As it is mentioned in section II some works have been done or suggested till now but it hasn't been popular yet. May be they are don't prepare a complete condition to do so in a real society. In section III we have suggested a system to the e-government to create a platform to do all electronic jobs on it so easily.

Every one in his city or country should have five major documents: Historical, Medical, Political, Study-stage, Job-stage. By using these five documents under a well programmed system, the government can control the country the money transfer, people transportation and activities done by organizations so easily. It can get statistics about every required case so precisely and run the system of the country in the case that no one would be unsatisfied. As described in the section 4 the government gets the cost of the system from the taxes and on the other hand save a lot of money from reduction of ministerial bureaucracy. This system prepares a

condition that we can imagine the elimination of cash in a country.

#### A. Future Work

The method we presented in this paper sets the stage ready for an interesting topic of research:

#### • A comparison among database systems suitable for an e-government system

So many companies have tried to produce database systems that can help program designers a lot. But all of them are not appropriate for all programs. Some are good for business programs and some for ministerial. Some can be used easily and others may be more secure.

### REFERENCES

- [1] A. Anthoney, J. Royle and I. Johnson, "The UK Children's Publishing House – Adapting to Change for the Multimedia Market," *School of Information and Media*, The Robert Gordon University, UK, 1999, p.26.
- [2] M. Shahedul Quader, "The Internet as a Strategic Tool to Gain Sustainable Competitive Advantages in the Area of Supply Chain Management," *European Journal of Economics, Finance and Administrative Science*, Vol. 2, No. 2, 2005, p.45.
- [3] E. Turban, D. King, J. Lee, D. Viehland, "Electronic Commerce: A Managerial Perspective," *Pearson Prentice Hall*, New Jersey, 2004.
- [4] E. Constantinidies, "The Internet as a Parameter of Strategic Planning: A Study of E-marketing Practices of Dutch SMBs," *Faculty of Business, Public Administration and Technology University of Twente, Netherlands*, 2005, pp.2-3.
- [5] B.A. Wagner, I. Fillis and U. Johansson, "E-Business and E-Supply Strategy in Small and Medium Sized Businesses (SMEs)," *Supply Chain management: An International Journal*, Vol. 8, No. 4, 2003, p.343.
- [6] M. Anass Khoja, "E-Government, Between Dream & Reality", Presented in the proceeding of the 3rd International Conference on Information & Communication Technologies: from Theory to Applications, *ICTTA'08, April 2008*.
- [7] Michael Quayle, "E-business in a turbulent world: usage in European small and medium size enterprises," *Int. J. Electronic Business*, Vol. 1, No. 1, 2003, p.42.
- [8] M. Karegar, A. Isazadeh, F. Fartash and T. Sadari, "Electronic Consulting in Marketing," Presented in the proceeding of the 3rd International Conference on Information & Communication Technologies: from Theory to Applications, *ICTTA'08, April 2008*.
- [9] M. Kargar, A.Isazadeh, F.Fartash, T. Sadari, "Easy Shopping by Electronic Credit," *Proceedings of world academy of science, engineering and technology Vol. 28*, April 2008, pp.342-345.
- [10] K. Barzilai-Nahon and H. Jochen Scholl, "Similarities and Differences of E-Commerce and e-Government: Insights from a Pilot Study," *The Information School*, University of Washington, 2006.
- [11] A. Osterwalder, S. Ben Lagha and Y. Pigneur, "An Ontology for Developing e-Business Models," *DSIage* 2002. P.8.
- [12] S. C Savvides, "The E-Economics of E-Information: Is The Internet The Great Information Equalizer?" *School of Business*, Cyprus College, 2005. P.6-7.
- [13] M. Hing Yu, Ch. Chern Lim and J. S Jin, "A Dynamic Framework for e-Commerce Portals," *IJCSNS International Journal of Computer Science and Network Security*, Vol.6 No.3B, March 2006. P.197.
- [14] Sh. Minocha, "Social, Cultural and organizational Perspectives on (B2C) E-Commerce Environments," *The open University of Walton Hall*, UK, 2005.