Volume 3, No. 4, July- August 2012



International Journal of Advanced Research in Computer Science

RESEARCH PAPER

Available Online at www.ijarcs.info

E-Governance: an easy way for implementing at rural area in Bangladesh

Mohammad Jahangir Alam Lecturer, Dept of CSIT Southern University Bangladesh Chittagong, Bangladesh mjajahangir@yahoo.com

Abstract: e-Governance is considered as one of the most significant procedure to get the full benefits of IT and to spread the advantages of IT around the country. Technologically the concept of e-Governance is simple but it has great power to involve the Information Technology for changing the society. Bangladesh government has been gradually implementing e-governance around the country since 2001 but most of this implementation is city centered, so rural people are not getting the benefits of e-governance for many problems. In my paper I have tried to focus the reasons for not getting the benefits of e-governance of rural people and provided a model of e-governance for the rural people of Bangladesh so that they can get the benefit of e-governance.

Keywords: Government-to-Citizen (G2C), Government-to-Business (G2B), Government-to-Government (G2G), Information Technology (IT), Information and communication technologies (ICT), Local Area Networks(LANs), Union Information Service Center (UISC), BTCL (Bangladesh Telecommunication Company Limited)

I. INTRODUCTION

This is the era of Information Technology (IT). To make transparent and effective the government works, to increase government efficiency, accountability and to improve the service delivery and participating the public in all aspects of government activities e-Governance can play a vital role.

So, the term e-Governance is the effective and efficient use of modern information and communication technologies (ICTs) (such as Internet, LANs and Mobile Phones) to improve the activities of public sector organizations with a view to establish good and transparent governance and to promote democracy for any country. The final objective of e-Governance is to create good governance [1].

The features of good governance can be identified as follows:

- a. Transparency
- b. Efficiency
- c. Effectiveness
- d. Accountability
- e. Justice
- f. Reliability e. Participatory Democracy
- g. Accessibility
- h. Equity [2].

Above mentioned features can be achieved through proper implementation of e-Governance using of modern information and communication technologies.

II. E-GOVERNANCE IS COMPOSED OF THREE MAJOR ACTORS

Mostly, the government, citizen and business concerns are the three main actors in the e-governance. Such as:

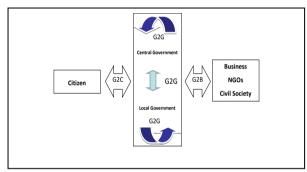


Figure-1: e-Governance model

A. G2C (Government to Citizen):

This is the communication process of individual citizens with the government [3]. Payment of utility bills such as electric bill payment system using mobile phone is a common example of G2C. Another example of G2C is Bangladesh Road Transport Authority (BRTA) website (http://www.brta.gov.bd/index.php). Any citizen can see the driving license exam's result or download the driving licenses form using Bangladesh Road Transport Authority (BRTA) website. Government should develop more website for all sectors of Bangladesh to involve the public to make the e-Governance successful.

B. G2B (Government-to-Business):

This is the interaction between central government and the commercial business sector to get the businesses information. This interaction may involves many reasons such as to establish corporate, NGOs or others commercial business or downloading different types of form. Most common example of G2B is corporate tax paying system to the government using National Board of Revenue website (http://www.nbr-bd.org/incometax.html) or applying for trade license from the government to run the business through internet using Office of the Registrar of Joint Stock Companies and Firms (http://www.roc.gov.bd:7781/) website.

C. G2G (Government-to-Government):

This is the non-commercial interaction between Government organizations, departments, and authorities and other Government organizations, departments, and authorities. The example pf G2G may be a request of allocation of budget by any department of the government. For example city corporation yearly budget depend on central government.

III. SOME IMPORTANT E-GOVERNANCE PROJECT IN BANGLADESH

- a. National Web portal of Bangladesh [http://www.bangladesh.gov.bd]
- b. Bangladesh Association of International Recruiting Agencies (BAIRA) [http://www.hrexport-baira.org/index2.htm]
- c. Bangladesh Bank/www.bangladesh-bank.org/
- d. Bangladesh Bureau of Educational Information and Statistics (BANBEIS) [http://www.banbeis.gov.bd/webnew]
- e. Bangladesh Civil Service (Administration)
 Academy [http://www.bcsadminacademy.gov.bd]
- f. Bangladesh Computer Council [http://www.bcc.net.bd]
- g. Bangladesh Export Processing Zones Authority (BEPZA) [http://www.epzbangladesh.org.bd]
- h. Bangladesh Fisheries Research Institute [http://www.fri.gov.bd]
- i. Bangladesh Forest Department [http://bforest.gov.bd/dev]
- j. Bangladesh Forest Research Institute [http://www.bfri.gov.bd]
- k. Bangladesh Hajj Information [http://www.hajj.gov.bd]
- l. Bangladesh Oil, Gas & Mineral Corporation (Petrobangla) [http://www.petrobangla.org.bd]
- m. Bangladesh Overseas Employement and Services Limited (BOESL) [http://www.boesl.org.bd]
- n. Bangladesh Parjatan Corporation (Tourism Development Corporation)
 [http://www.parjatan.org]
- o. Bangladesh Public Service Commission [http://www.bpsc.gov.bd]
- p. Bangladesh Railway [http://www.railway.gov.bd]
- q. Bangladesh Road Transport Authority [http://www.brta.gov.bd]
- r. Bangladesh Road Transport Corporation [http://www.brtc.gov.bd]
- s. Bangladesh government all forms [http://www.forms.gov.bd]
- t. Bangladesh Planning commission [http://www.plancomm.gov.bd/about.asp]

IV. WHY SEPARATE MODEL OF E-GOVERNANCE FOR THE RURAL AREA OF BANGLADESH?

Bangladesh has total 14, 97, 72,364 thousand (as on 15 march 2011) people which peoples literacy rate is 51.8% [4]. But Majority percent people don't know the use of computer. Besides, most of the people live in village area in Bangladesh. Approximately 82 percent of the country's people live in rural areas, virtually all of them making their

living exclusively or substantially from agriculture [5]. Moreover, most of the villagers don't know the use of computer which is very pessimistic site to implement egovernance all over the Bangladesh. Problems of implementing e-governance in rural areas of Bangladesh are as follows:

A. Illiterate people:

Total peoples literacy rate is 51.8%. But, we can't say them as a computer literate people because most of them don't know how to use a computer. In my survey among the 1000 literate people only 10% literate people know the proper use of computer, in this category maximum people are young generation. 10-20% literate people don't know how to use a computer and most of them are oldest person. Rest of the literate people knows how to operate a computer and can complete the some official or personal jobs using computer.

B. Electricity problem:

To use a computer, power is a very big factor. But electricity problem is a national problem of Bangladesh. General people to industries all are suffering for power crisis [6]. People have to pass a large portion of time without electricity from their daily life because presently produced electricity can not fulfill the demand of daily required.

C. Internet problem:

As is in most of the Least Developed Countries, Inadequacy of ICT infrastructure is a common problem in most government offices of Bangladesh [7]. Most of the government offices are still out of internet connection. Though, Bangladesh is connected with high speed fiber optics connection but all of the government offices are not connected to the internet yet. So, all government officials can not get the opportunity to use the internet and different types of government websites. Such as, Most of the Upazila level government offices are not connected to the internet

D. Public awareness about government portal:

The majority of the government officials and public are unaware about the e-Citizens Service application portal [8]. Very few percent of the government officials and general people of the country are aware about the portal. Only few portions of the people are using the e-governance portal.

V. PROPOSED SOLUTIONS

A. Internet or network model:

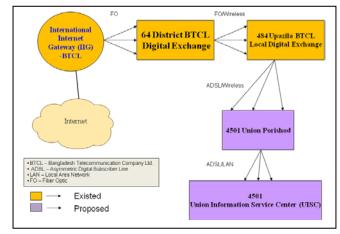


Figure-2: Proposed network for UISC

There are 4451 Union Porishod in Bangladesh [9]. It is difficult to provide proper internet connection till village level for the government by existing 2.5G Cellular Internet Connection (i.e. by GPRS or EDGE or CDMA) because of their slow speed & high cost. It is also noted that upcoming 3G Cellular Internet Connection's speed will be faster but it will not be feasible because of high costing and this is also difficult to setup a new network up to village within a short span of time and with minimum cost using optical fiber or microwave wireless connection.

Here, I have proposed a new plan for making a high speed network connection up to village level using BTCL's (Bangladesh Telecommunication Company Limited) exiting network setup. That will make easy for government to setup Union Information Service Centers (UISCs) with high speed internet connection within short time so that villagers can access the UISCs (i.e. - internet) 24X7 hours. To provide internet connection up to the Union Porishod (i.e. – UISCs) and government can take connection from BTCL's Local digital exchange through ADSL (Asymmetric Digital Subscriber Line)/Wireless link. Government can build and install this network infrastructure by lowest cost and with very short span of time. At this scam government can use BTCL's unused data bandwidth at lowest cost to provide faster internet service to the rural people (i.e. – to UISCs). By this network government can make an own private network by VPN (Virtual Private Network) technology between the UISCs and government offices to share important information and applications between them, which are classified for general people. That is, through this network government can reach end village people to implement the real e-governance.

B. Electricity:

This is not possible for any government of any country in the world to solve power crisis within short time. To establish power plants or solve the power crisis every government needs more time but to run with the robust technology ICT each every government needs to implement e-governance within shortage possible time. To fulfill the demand of electricity at UISCs, government can install solar panel or generator as an alternative source of power so that every center can run 24 hours.

C. Education:

In Bangladesh, most of the people are illiterate and very small percentages persons have the knowledge of computer education. Without knowledge of Computer no one can use the computer and access the government web sites which are a big barrier to implement e-government. But, it is also not possible for any government to make them educated in computer education over night. To overcome the problem government has to recruit some skilled computer educated people to support the villagers so that people can access the government web portal to complete their tasks.

D. Public awareness:

This is not a main aim of e-governance only involvement government officers in the e-governance project. Without public involvement it will not be a successful project. So, government has to take some steps to motivate the public to use different types of government web sites for their daily official tasks. Government can do it by arranging different types of seminar, symposium, showing short films to the public places and broadcasting some drama and advertisement in Television so that they know the advantages of e-governance.

VI. CONCLUSION

Bangladesh is a developing country. Its economic condition is not improving as expected for many reasons. Corruption is one of them. The corruption level in Bangladesh is very alarming. Especially, the corruption level in public sector is so high. Government can remove corruption from the all sectors implementing e-governance all aspect of Bangladesh and it should be main step of government to ensure the opportunity of all people to access e-governance and get the benefits of e-governance. So, it is true that if the public access the government website for their different types of jobs, corruption will be reduced day by day. It will bring good result for the nation because the government is struggling to make the country free from corruption.

VII. REFERENCES

- [1]. Md. Anwarul Kabir, e-governance discourse: reality in Bangladesh, Published on February 13, 2007
- [2]. dr. m. Lutfar Rahman, e-government and its security, http:// www.thedailystar.net/suppliments/2011/anniversary/part1/ pg13.htm
- [3]. Sasm Taifur, PROBLEMS OF E-GOVERNANCE IN BANGLADESH and possible steps towards solutions, http://goliath.ecnext.com / coms2 /gi_0199-683885/introducing-e-government-in-bangladesh.html
- [4]. population and housing census 2011 Bangladesh at a glance, 2011
- [5]. http://countrystudies.us/bangladesh/67.htm
- [6]. Ziauddin Ahmed, Electricity Crisis of Bangladesh: Result of Organizational Inefficiency?, Energy and Environment Research Vol. 1, No. 1; December 2011
- [7]. K.A.M. Morshed, E-Governance: Bangladesh Perspective, http://unpan1.un.org/intradoc/groups/public/documents/AP CITY/UNPAN026253.pdf
- [8]. Prof. I. Kushchu, Md Wahidul Habib, Chowdhury Golam Hossan, success and failure factors for e-government projects Implem- Entation in developing countries: a study on the perception of government officials of Bangladesh,2011
- [9]. Country Reports on Local Government Systems: Bangladesh

http://www.unescap.org/huset/lgstudy/new-countrypaper/Bangladesh/Bangladesh.pdf