



## ICT and E-Governance in Bangladesh: an Overview

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### ARTICLE INFO

#### Article history

Accepted: 21 Feb 2018

Online Released: 25 Feb 2018

#### Keyword

E-governance  
ICT  
Development  
Bangladesh

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### ABSTRACT

Bangladesh is on the way of being a smart country. Since last decade the country has been moving faster toward the development. E-governance is enhancing to make the path smoother. People are now getting services staying at their own room. It is reducing time, cost and harassment. Government officials are also being smarter using ICT. Paper files, number of visitors and corruption are being reduced from government offices. On the other hand efficiency and effectiveness, trust, accountability, transparency, etc. are being increased. Though the country is not excellent at e-governance it is progressing. As time passes, government is undertaking different initiatives for flourishing the sector. Various departments, parks, divisions, projects, etc. are being implemented by the government to reap maximum benefit from this sector. ICT has opened a new and prosperous avenue for better employment, income and environment. The impact of ICT on livelihood of Bangladeshi people is smart, prestigious, cost saving and income enhancing. Bangladesh should keep conformity with the pace of ICT in the world to be more smart and benefited.

### INTRODUCTION

It is very important to cope with the fast world. It is also important to make citizen happy reducing all barriers to get government services easily. Before a decade government services were synonymous to harassment. People had to waste a huge time and money, officials had to maintain a lot of client manually which made them bored and tired. Red-tapism, corruption, bribery, illegal tendering, inefficiency, unproductivity, harassment by middleman- all were the characteristics of government services and offices. But now-a-days government service has become popular, dynamic, effective, time and cost saving. Providing various services the government is now reducing time from 30 to 16 days, cost from USD 3.3 to 1 and the number of visits required to the government office from 5 to zero (a2i, 2018). Not only providing services through websites government is now focusing on social networking. Different organizations of government are using social media such as Facebook, Twitter, etc. At present government is using 267 Facebook pages to engage citizen socially. Government has taken a

very smart ICT policy which is able to address the present crisis and challenges. High-tech parks and other technology infrastructures are being developed. The a2i project is a blessing on the citizen of the country. Through this project the country has already exceeded the expectation. Services and facilities which were unimaginable 5 years ago are now available on the palm. Benefits of e-governance are myriad and they are expanding day by day. So, both providers and users should have a clear comprehensive understanding about the e-governance in Bangladesh to reap its benefit to the maximum. With this direction this study has been designed to have clear understanding about government's online services and initiatives to develop e-governance; to know the progress in ICT from international indexes; and to analyze the impact of e-governance on citizen and society.

### METHODOLOGY

The research questions backing the study are what the present status of e-governance in Bangladesh is, what initiatives government has taken to build

digital Bangladesh and what the progressing status of e-governance in Bangladesh is. With respect to these questions the study followed a specific methodological framework which is mentioned below.

### **Theoretical framework**

To explain the e-governance in Bangladesh Maturity Model can be considered relevant. Again, among different forms of the model, 5-stage Hiller and Belanger Maturity Model is best suited which is as follows:

- “Stage 1: information- the most basic form of web sites, i.e., posting information.
- Stage 2: two-way communication- communication between citizens and the government.
- Stage 3: transaction- online services and financial transactions available for citizens.
- Stage 4: integration- all services are connected. A single e-portal for all e-government services.
- Stage 5: participation- political participation, posting comments and voting” (Fath-Allah, 2014).

According to above model Bangladesh is now basically at the second stage, trying to achieve the third and get rid of first one. Some government websites are just posting information where there is no scope for citizen to communicate or contact. On the other hand most of the government reliable websites are having with the opportunity for citizen to communicate or contact with government. Moreover, very few government websites are providing services with limited transaction also.

### **Conceptual framework**

E-governance is the public sector’s use of information and communication technologies with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making government more accountable, transparent and effective (a2i, 2017). The basic aim of e-governance is to ensure SMART government which stands for simplicity, morality, accountability, responsive and transparency. E-governance plays with basically four players which are Government-to-Government (G2G), Government-to-Business (G2B), Government-to-Employee (G2E) and

Government-to-Citizen (G2C) (Shivakumar, 2002). Also some experts mentioned the players as infrastructure and connectivity, ICT industry development, human resources and e-governance (Sikder, 2017).

### **Analytical framework**

This article is based on secondary data. It is actually a combination of reviews of various government and international websites, portals, articles, newspapers, etc. related to e-governance. Strict endeavor was made through rigorous review of the sources and the results were presented in tabular form.

## **FINDINGS AND DISCUSSION**

### **E-governance in Bangladesh**

Bangladesh has already participated in the race of e-governance. The government has various parts working to enhance the progress of e-governance. Two ministries, Ministry of Posts, Telecommunications and Information Technology and Ministry of Science and Technology, are working and responsible for the e-governance. There are other organs of government working for the development of e-governance which are Post and Telecommunication Division, ICT Division, BTRC, Bangladesh Hi-Tech Park Authority, Bangladesh Computer Council, Office of the Controller of Certifying Authorities, etc. The project Access to Information (a2i) is working with the office of Prime Minister to enhance the development of e-governance. The world’s largest web portal, National Web Portal has connected all the government websites under a banner. The Government has already formed ICT policy which is a guideline of achieving digital Bangladesh. All these are the elements of e-governance in Bangladesh.

### **ICT Policy of Bangladesh**

After revising previous policy, ICT Policy 2009 has been published by Ministry of Science and Information & Communication Technology which is available in the website of prime minister’s office (in Bengali form) and in the website of Bangladesh Computer Samity (BCS). It is a

comprehensive and complete policy in which ICT has been considered as one of the most important parts for the development of the country. Article 19 (equality of opportunity) of the constitution Bangladesh has been mentioned as the base of the policy. Through this policy government wants to ensure social equity and effective utilization of the nation's limited natural and abundant human resources (National ICT Policy, 2009). It is hoped in the policy that using ICT will increase the GNP twenty fold within 30 years. The policy has 10 broad objectives, 56 strategic themes and 306 action items. To achieve these, three types of actions have been proposed which are short term (18 months or less), medium term (5 years or less) and long term (10 years or less). The vision of the policy has been set as maximizing the use of ICTs for national development. This use will help to ensure transparency, responsiveness and accountability. It will also help to get skilled people, social equity and cost-effective delivery. Through all of these the country will be a middle income one by 2021. The policy includes 10 objectives along with their strategies which are shown in Table 1.

Table1  
Objectives and strategies of ICT Policy 2009.

Sl #	Objective	Strategy
1	Social equity	Mainstreaming backward community, encouraging citizen participation, involving private sector and NGOs.
2	Productivity	Getting highest productivity of different sectors ensuring maximum utilization of ICT including important e-services.
3	Integrity	Using Bengali language, making government services efficient by reducing time and cost, increasing connectivity among government offices.
4	Education and research	ICT will be taken through increasing research and collaboration, ensuring ICT literacy in government offices and universities.

5	Employment generation	Providing incentives, fixing skill standard, developing more IT professionals.
6	Strengthening export	Improving quality, making good policies, marketing, promoting ICT products, increasing facilities for software companies.
7	Health care	Developing health care and health care delivery system and medicine, raising awareness.
8	Universal access	Universal connectivity and internet infrastructure.
9	Environment, climate and disaster management	Preventing environment by using ICT.
10	Support to ICT	Creating suitable infrastructure for ICT including power supply and internet access, decentralizing of ICT centers and developing necessary education for IT development.

### ICT Division

This division is responsible for the development of ICT in Bangladesh. It is a part of Ministry of Posts, Telecommunications and Information Technology. Its vision is to ensure "reliable and secured ICT towards sustainable development". Function of the ICT division is vast. It works for formulation and execution of necessary ICT policies, research and taking initiatives, increasing integrity with other government organs, providing and coordinating e-services, creating skilled IT professionals, development of ICT infrastructure including IT parks and export of the ICT products. This division provides huge services from the website. Among these most important services are e-services- web mail, e-file, e-tendering, online application and application form- passport form, WASA water bill, a2i service innovation fund and other government's forms.

### Bangladesh Telecommunication Regulatory Commission (BTRC)

According to Bangladesh Telecommunication Act 2001, BTRC was established as an independent body. The vision of BTRC is to “facilitate connecting the unconnected through quality telecommunication services at an affordable price by introducing new technologies”. The main objective of the organization is to provide internet and telecommunication services more efficiently and enhance new initiatives to develop the country. BTRC has mentioned its function as “establishing, operating, regulating and maintaining telecommunication establishments and providing various telecom services in the country” (BTRC, 2018).

### Bangladesh Computer Council (BCC)

BCC is one of the important organizations working to promote e-governance. It is a statutory body under the Ministry of Posts, Telecommunications and Information Technology. It was established by Act No IX of 1990 (BCC, 2014). The main objective of this organization is to promote ICT. Its specific objectives are to develop human resource, formulate and implement national strategies, contribute to implement national ICT plans, increase the use of ICT and determine the standard. The main function of the organization is “to promote the use of computer & ICT for the socio-economic development of the country”. The other specific functions are developing infrastructure, promoting professional efficiency, formulate and implement strategies, helping other government organizations, ensuring security, developing computer and IT related knowledge and skill and after all necessary steps to develop ICT and popularize the use of computer.

### Bangladesh National Portal

One of the greatest achievements in the field of e-governance is Bangladesh National Portal which is known as *Bangladesh Jatiya Tottho Batayan*. This portal is a great contribution of e-governance and a nice gift to the citizen. Objective of the portal is to reach to the doorstep of citizen with services. It took two and half year to be completed. It was launched on 23<sup>rd</sup> June, 2014. Slogan of the portal is ‘Information and services in a single window’. This is the world’s largest web portal having total

25000 websites of different organs of the government (Bangla Tribune, 2014). Website traffic statistics provider Alexa (2018) provides important information about the National Web Portal which is shown in Table 2.

Table 2  
Website statistics of Bangladesh National Portal.

Heads	Bangladesh National Portal
Website address	http://www.bangladesh.gov.bd
Global rank	50975
Rank in Bangladesh	201
Visitor from Bangladesh	94.6%
Visitors’ gender	Male (almost 100%), female (greatly under represented)
Visitors’ education	Graduate school (almost 100%), other (greatly under represented)

The portal virtually connects more than 43000 government offices, provides information about 400 services from 36 ministries and directorates, has more than 2.2 million contents and more than 71000 photos of archaeological, historical & tourism sites. The portal includes 7.65 million contact details of officials with more than 219 e-services to the citizen including 3000 information officers, 71000 trained officers to update content, 1000 trainers and 1000 innovation teams and ICT coordination committees. More than 1500 government forms from 158 offices are available in this website. Services are being provided with service profile and service map. There are 400 service profiles and 400 service maps. More than 60 million visitors visit this portal per month (GoB, 2014), (a2i, n.d). The portal is powered by a2i, Cabinet Division, BCC and BASIS (Bangladesh Association of Software and Information Service).

### Access to Information (a2i)

a2i is a program run by the office of prime minister supported by USAID and UNDP. It was started in 2009 according to the Vision-2021 and the right of Information Act 2009 (Wikipedia, 2018). Primary goal of the program is “to ensure easy, affordable and reliable access to quality



public services for all citizens of Bangladesh” (a2i, 2018). The a2i website has demonstrated some numeric data about the accomplishment. One of the most important information here is that through it National Portal is providing 450 services to the citizen. Moreover, through this program Bangladesh has got more than 5286 digital centers which are providing more than 116 services and every citizen can get services from these centers within 4 km distance. In a word the a2i is carrying government services at the door step of citizens. 356 thousand of citizens are visiting 1560 government forms and 150 thousand forms are being downloaded every month. These have simplified more than 400 public services, disposed 994 thousand paper files and so on.

### **High-Tech Park**

Bangladesh High-tech Park Authority is going to establish total 28 IT parks across the country among which three visible are mentioned below.

#### ***Bangabandhu Hi-tech City***

This is one of the largest IT related program of the government. This project is located at Kaliakoir, Gazipur. Software and hardware will be produced in this park which will meet the local demand and bring foreign currency through export. It is hoped that this will create job opportunity for more than 70000 people.

#### ***Sheikh Hasina Software Technology Park***

This park has been started on 25<sup>th</sup> April, 2014. The purposes of this park are to build environment friendly IT city, to encourage foreign investment in IT sector, to create skilled IT workforce and to create job opportunity in IT sector. It is estimated that this park will create job opportunity for 20000 people.

#### ***Janata Tower Software Technology Park***

Located at Karwan Bazar, Dhaka this park has been inaugurated on 18 October, 2015. This park will provide high speed internet, 24-hour electricity supply and other facilities to promote business. Already four companies have been accommodated in the tower. Ten initiatives will

get space for one year for free in this tower to promote the ICT sector of the country (Bangladesh High-tech Park Authority, 2018).

### **Technological Advancement**

Infrastructural development or technological advancement is one of the most important pillars of e-governance (Shivakumar, 2002). Bangladesh is now progressing in this sector. Internet service, internet user, electronic device, hardware and software companies all are progressing to achieve the Vision 2021. Some very important information about technological development are mentioned below (Halim, 2017; Sikder, 2017; Bangladesh High-tech Park Authority, 2018; a2i, 2017; Export, 2017; Wikipedia, 2018).

About 79.7 million people (almost half of the total citizen) are now using internet in Bangladesh. 77.88% have internet connection through mobile phone while 9.39% use internet with computer. 12 high-tech parks are under construction which will worth \$10 billion by 2030.

Government is going to set up world’s fifth largest 4-tier data center at Gazipur district. It is hoped that the data center will reduce burden of paper file from government offices. By 2021 it is targeted to earn \$5 billion from IT export and increase IT professionals up to 2 million.

Two of government projects named infosarkar-2 and Bangla Govnet have connected 18415 government offices. Another project named inforsarkar-3 is now working to bring all unions under broad band connection. 800 government offices and educational institutions have video conference facilities. Government to set up 28 IT parks across the country. Minister of State for ICT division has expressed his hope that ICT sector will create 10 lac job opportunities by 2021. 81% have mobile phone accesses (with or without internet connection). “78% don’t use computer. Out of 22% computer users, only 10% have personal computers and 12% use computers in cyber cafés, educational institutions, offices, etc”. 400 IT companies are now eligible to export in 60 countries including North America.

According to BASIS, more than 1500 software companies are now working in the country. Total worth of the ICT sector is \$600 million. More than 250 thousand professionals are now working in this sector.

## CONCLUSION

The progress or present status of the country is not so satisfactory. But as a third world country, it is a matter of hope that Bangladesh is on the race and developing day by day. This development is possible only when the top leadership of the country is highly ambitious to see the country a really developed one. Vision 2021 and initiatives of the government are on the positive track. Government's initiatives are almost successful to satisfy people about the success of Vision 2021. The people are also conscious and interested about the e-governance. Citizens are already getting the benefits of e-services. Now it is high time to accelerate the present pace of e-governance and other areas to reach the country at the apex of development. This acceleration is challenging no doubt but not impossible at all.

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