E-Governance: Present Scenario and Future Implementation Challenges for Government

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Abstract

Digitalization of the governance is new phenomenon. Due to unique utilization and befitting contribution for the administrative and nonadministrative institutions, all are interested to develop the e-governance. Bangladesh having affected by the globalization or computerization, is endeavoring for developing e-governance. E-Governance process has been playing vital role in many areas ranging from the private to public life. It assists to settle down varied degrees of complexities arising out of the administrative activities and delivers its benefits to the mass people. With this process, Government has many laws, policies and regulation to ensure the accountability, transparency, and above all justice are very much dependent on the full pledged participation of the people. Political instability, malpractice in democratic paradigm and indiscriminate corruption in different organs of Bangladesh have thwarted overall development of standard human life and service to the public. Though corruption has been customized with the behavior of the people of Bangladesh, e-governance would certainly lessen unauthorized practice in the administration. This article has attempted explore the existing status of the e-governance system. With a view to ding it, it would also focus on the initiatives taken by the Government to accelerate the e-governance mechanism. Additionally it would try to find out the ramifications of the egovernance with recommendation for evaporate those bedrocks.

Keywords: Governance, E-governance, Digital service and digital infrastructure.

Introduction:

There was a time when people had to go to government office several times to get government desires services. Not only that, even after visiting many times, they did not get the assistance they wanted. But times have changed. Government services are now in the hand of the people. People are getting their desired services very quickly while sitting at home. And what has worked in the process of facilitating public services is information technology. People can meet them any services by pressing a button on

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their mobile phone or computer. As a result, the workload and cost have been reduced, and at the same time, people's money and time are being saved, and the government can ensure people satisfaction. To run the government function smoothly and deliver government service to the people. Day by day, digital governance is gaining popularity. Developed and developing countries have been able to prevent corrupt they ensure transparency, accountability, and people participation in decision-making. The Bangladesh government is not far behind in this competition. This advanced system has been designed to make service delivery faster, hasslefree, and ensure transparency and accountability. Bangladesh government has a different operating project to establish e-governance in all activities. One of the best examples of e-governance has been providing support to operate government in Singapore and South Korea. In Singapore, this country has accepted an e-governance system in all aspects of the workplace, education, public service delivery, business, etc. And now they are taking the lead in using technology in all activities (Sriamesh and Rivera-Sanchez, 2006). Different countries have to invest billions of dollars in establishing an e-governance system. Like china has allocated multi-billion-dollar to the based automation system of governance functioning so that citizen can get their service very quickly (Pani & Mishra, 2009). Inspired by the other advanced countries, Bangladesh's government started to transform stereotypes into a digital technologybased government. In 2009. Before taking power, the Bangladesh Awami League government have promised several areas, including transforming Bangladesh into Digital Bangladesh, proudest action to control rampant corruption and comprehensive policy to ensure electricity and sustainable economic growth (Bhuiyan, 2011). These all activities will be implemented in the manner of Digital Bangladesh called Vision 2021.

History of e-government system in Bangladesh

In 2009, Bangladesh Awami League took power and promised in their election manifesto that they transom Bangladesh as Digital Bangladesh by They started to transform different public offices and govern 2021. activities too electronically. However, Bangladesh has a long history to establish an electronic governance system. It was started in 1964 when the IBM computer was installed in Bangladesh atomic energy commission before Bangladesh independence (Hasan 2003). Then it took a long time to go advance. After the independence in 1971, the Bangladesh government has established the Bangladesh computer council (Banglapedia, 2014). at the same time, in 1998, the government has established the Bangladesh Association of Software and Information Services (BASIS) to make different software to meet the government and citizen need by computerizing other government functions (Khan 2004). At the same time, government and private instituting started hiring fresh

ICT graduates to make software and transform office activities through digital means (Parvin et al., 2011). The government established 4554 digital centres to disseminate information among the rural poor people so that nobody is deprived of government information services as result information communication bring a massive innovation for the public and private institution. The website was created in 2002 to simplify the Hajj system in Bangladesh under the Ministry of Religious Affairs so that the pilgrim can complete their hajj without any hassle (Choudhury et al., 2010). In the same year, ITC policy was formulated to improve public efficiency and effectiveness of the government activities and ensure quality services (Hoque, 2005). The government started to implement and using ICT in all sectors. As a result, Bangladesh has dramatically reduced poor and maintaining economic growth (Khan, 2013; Islam 1992). Since then, Bangladesh starts to accelerate their economic growth with the help of information and communication technology. The progress of the egovernance index is poor in condition, but the situation is ameliorating year after year.

| Name of the country | Ranking among country | Ranking 193 | out EGDI |
|---------------------|-----------------------|----------------|----------|
| Sri-Lanka | 1 st | 74 | 0.5418 |
| Maldives | 2^{nd} | 94 | 0.4813 |
| India | 3 rd | 118 | 0.3834 |
| Bhutan | 4 th | 143 | 0.2829 |
| Bangladesh | 5 th | 148 | 0.2757 |
| Pakistan | 6 th | 158 | 0.2580 |
| Nepal | 7^{th} | 165 | 0.2344 |
| Afghanistan | 8 th | 173 | 0.1900 |

Table: E-governance country position

Source: Organized the author based on UN E-Governance Survey 2016 and Rahman 2016

From 2001 to 2005, the corruption situation in Bangles was very abysmal. The position of these countries belonged to the bottom of all nations (Hasan, 2007; Knox 2009; the daily star 2016). But the scenario started to changes. Now Bangladesh has become the 13th most corrupted country in the world, which is extremely unfortunate (The daily star 2016, TIB 2016). This has been happening due to the implementation of the electronic government system. The more the electronica system government can implement, the less corruption will be occur in a country (Knox 2009; Lupu & Lazăr, 2015).

Concept of E-governance

Governance and government are very complicated terms and interchangeable terms (Rhodes 1996). In terms of government, it's an institution that has the power to run a country. At the same time, it can execute its power over the people (Fasenfest 2010). In this traditional process, people have limited power to participate in the decision making power actively. In the traditional governance system, the rulers are not more accountable or responsible to the people. At the same time, most people cannot exercise their power over the politician. Because citizens are very much aware the government activities. People are not well informed because of what the government is doing, and sometimes the government does not want to disclose their activities publicly. On the other hand, in the Electrical governance system, everything becomes transparent. People can know all of the government activities. And in this process internet has been widely used to monitoring and functioning all governed activities (OECD, 2003). Electronic governance system has opened a new horizon to implement all government activities in a short time, which help to reduce government cost and reduce time. At the time, it also helps the service recipient by reducing time, cost, and number of visits. It involves many applications to implement digital governance. It's a process by which government can provide their service through any electronic means. At the same time, citizens can receive their service without any physical appearance in the public office within shorts time and at minimum cost. Nowadays, anyone can get service from anywhere from national and internationally, people can get government information services, birth certificates, schools, college, university admission, public job application, internet banking. Electronic payment system for shipping, bill payment for different government utility services. For implementing all of the activities, there is no need to be a physical presence in the public office (De Kleine et al., 2012). World Bank defined that electronic governance system incorporates different govern cement agencies with different electronic tools including Wide Area Network, the Internet, computer, mobile phone, tab, and another electronic device (Panzardi et al., 2002). Using these devices helps to reduce corruption, government expenditure. All of the activities will be implemented with the help of fewer human resources. Electronic devices reduce human effort. Establishing electronic governance has four stages. Catalogue, transection, vertical integration and Horizontal integration. Catalogues incorporate online presence, catalogue of government information, presentation of government information and access to different government forms. The transection stage government works on the database for online data, and forms are upgraded in the online transaction. In the vertical integration stage, different local government

systems are linked with the central government system. At the same time, government activities are done electronically. Horizontal integration occurs within the same government official (Layne & Lee, 2001). The Egovernance system can make a bridge or make a comprehensive strong network among Government to Government, Government to citizen, Government to Business, and Government to Employee (Gupta and Panzardi, 2008). G2 G (Government to government): when the interaction between governments and the government is called G2G (Government to government). This interaction can be horizontal or vertical. Government can interact between and among their different organ at any time without an impediment like the central government can interact with local government, the state government can communicate with provincial government etc. (Marche & McNiven 2003; Carter & Bélanger 2005). G2C, or the government-citizen approach: This interaction or communication is between the government to the citizen in which different forms of claims and government information can be downloaded from different websites. Citizens can avail different government services electronically (Riley, 2003). At the same time, citizens have free access to the government information Centre where citizens can share their opinion in government decision-making and policy-making process at any time and place (Misra 2006). G2B or government to business encompasses different commercial organizations that need different types of information to continue their business and set out their own business (Heeks, 2001). Nowadays, it becomes a straightforward and popular start because getting government approval and documents is available online. Any entrepreneur can operate a start business very easily (Palvia & Sharma 2007). At the same time, it becomes easier for the government to provide approval to the business entity. At the same time, the government can control business entity a very convenient way (Saxena, 2005). For example, doing business under license over the Internet, paying corporate tax, e-commerce and electronic fund transfer (EFT), etc. G2E or Government to Employee: It has been practicing that generally, the government are the largest employer worldwide. As a result, the government of Bangladesh has to have a huge staff. At the same time, it isn't straightforward for the government to manage its huge employee. So by using an e-government system, it can be solved and managed very easily. The government must keep in touch with your job (Fang, 2002; Rao, 2011). Traditionally, this communication was established through a manual meeting as the last meeting or in person. Still, this communication was digitally established through a digital form such as e-mail or video conferencing, etc. through this system, is very easy to organized meeting where as a one can join from a different place. At the same time, there is no requirement to join in the meeting physically (Gupta et al. 2008).

The objective of the Study

- > This article is intended to fulfil the following objective
- ➢ to the undescended e-governance system
- ➤ to evaluate the current situation of e-governance in Bangladesh
- > To identify the challenges a pragmatic solution for the challenges.

Methodology:

Qualitative research is globally accepted in the social science field (Stenbacka, 2001). Secondary information incorporated massive data that are already preserved differently. The secondary sources include government reports, different organizational studies, archive data, books, journal articles, newspapers and so on (Stewart & Kamins 1993). It is widely used to conduct any studies in the research field (Smith, 2008). Secondary data has been used to start research and it helps generate new ideas and techniques to carry out the research. It also provides excellent knowledge and overview regarding any specific topic (Donnellan & Lucas 2013). The Study is based on secondary data a data has been collected from different books, academic journals, government and private institution reports, national and international daily newspapers and other websites.

Existence institutional capacity of Bangladesh government

There are different organizations and company have been working to established digital Bangladesh. Their function is other. Some institutions are working independently.

Different ICT policies

To established and implement electronic governance, it has to have a legal, institutional framework and low. The Bangladesh government has already passed ICT policy in different times, and the ICT policy 2002 has taken to establish a knowledge-based society for ensuring digital country. At the same time, the government has to make and established digital infrastructure and develop human resources, internet banking and make all of the utility services as the world has been changing in terms of public service and development dramatically. Bangladesh has to cope up with this trend. Without this Information technology, Bangladesh is not coping up in this new environment. The Bangladesh government already connected with the Fiber optic Submarine Cable network to speed up the Internet, which helps to make faster government activities. Then in 2006, the Information Communication Technology Act 2006 has been passed to provide some guidelines, including data security and safety. This act has made provision for electronic signatures for the first time in Bangladesh. At the same time, it emphasis ensuring digital data security and endorse

the penalty system. In 2009, national ICT policy 2009 has passed due to changes and the different demands of the time, situation and society. ICT act 2009 has been considered a timely and comprehensive act that incorporates social equity, productivity, and integrity. At the same time, it also emphasizes ICT related education and research focused. At the same time, employment generation also emphasizes increasing software export, using ICT on the health sector, and ensuring universal access to information.

Ministry of Science and Technology

Ministry of Science and Technology was formed in 2002 to emphasize ICT and accelerate the use of ICT in different aspects and functions of the government. The primary purpose of the Ministry of Science and Technology is to establish a Bangladesh. The government will ensure socio-economic development by utilizing information and communication technology. Thus ministry has been working to implementing a different project to transform the stereotype society into a digital community.

Access to information (A2I)

Access to information (A2I): has been working since 2007 during the caretaker government, which has abolished later. This project has been working under the direct umbrella of the Prime Minister Office.

This project has been operating with the financial assistance of UNDP and the ICT ministry and cabinet division. It is working and administrating other research all over Bangladesh (Minges et al., 2011). A2I was also working to digitalized government different files. More than 6 million files have already been preserved electronically. Government officials are using official e-mail and various social media. People are getting some service electronically, which help to reduce time and cost.

Bangladesh computer council

Bangladesh computer council has been working as a statuary body. This institution is playing a very crucial role and assisting different ICT policies. This institution is also helping the government by providing additional training courses workshops for the government official and people. It also helps to make human development. This institution is responsible for the certified data centre in Bangladesh.

Bangladesh High Tech Park authority

Bangladesh High Tech Park authority is working and operating a different project to established various high tech industries in another region of Bangladesh, including Bangabandhu Hi-Tech City (Kaliakoir Hi-tech Park Gazipur), 'Sheikh Hasina Software Technology park Jessore', Sylhet project, Silicon City, Rajshahi, Sheikh Kamal IT Training and Incubation Center, IT/Hi-Tech Park at District Level (12 District) project, Janata Tower SIP, etc. The vision of the Bangladesh Hi-Teck Park Authority is to extend the IT/Hi-tech industry.

Bangladesh Telecommunication Regulatory Commission (BTRC)

Bangladesh Telecommunication Regulatory Commission (BTRC) was established in 2001, and after one year, it started to function. BTRC is responsible for controlling all of the mobile phone operators installing fiber optics cable and maintaining satellite. The primary function of the BTRC is providing licensing for mole hone phone operators, managing international voice calls, national frequency allocation and extending the fiber optic cable all over Bangladesh (Husain 2012). This organization was also responsible for formulating different laws for the telecom-related business (Husain 2011).

Bangladesh Submarine Cable Company Limited

Bangladesh Submarine Cable Company Limited was formed in 2008 to provide telecom service. This company is orating as an international submarine cable and making a network with the world. Day day the functioning of this company has increased as the use of internet activities in increasing

Teletalk Bangladesh Limited

Teletalk Bangladesh Limited was formed in 2004 and still has been operating as a government-owned telecom institution. There is only one government operator to ensure citizen services and control the competition among the other mobile phone operators. This government organization is offering different internet facilities for the student and women.

Challenges of implementing Digital Bangladesh

Bangladesh has been facing different challenges to implementing electronic governance, including technological and financial difficulties. As this is new for the Bangladesh government, some challenge's has been identified.

Uninterruptable internet services

For ensuring digital Bangladesh, it required uninterruptable internet service. But unfortunately, the Bangladesh government are still too far away. Still, the government cannot established stable inter-service. As a result, sometimes, citizens are not able to get access to government service. At the same time, government official activities are not functioning correctly.

Limited internet speed

Limited internet speed is another constrain for ensuring and establishing electronic governance. All Bangladesh are not still under cover of fiber

optic cable. As a result, it isn't easy to provide high-speed Internet all over Bangladesh. Fiber optic server and high-speed internet service are available in the city area where local people are deprived. At the same time, the internet service is not centralized. As a result, wherever we go in the metropolitan city, the internet cable is visible. Sometimes city corporation authorities take action and cut all of the hanging internet cables. As a result, internet users face internet problems. So this problem has to be solved immediately and has to take the necessary steps to increase internet speed for Bangladesh.

Very high cost of internet service:

Internet accessibility has to be very chipper to establish a digital society. But the actual scenario is quite different. The internet cost is very high at the same time. Mobile internet is costly and not unlimited. Internet cost is supposed to be chipper and user friendly.

On the other hand, all of the broadband users have to pay a connection charge. As a result, it is very diffu7clt to use the Internet for low-income people and students. And there is no universal standard mobile intern package.

Lack of electricity supply and computer accessories

To ensure electronic service delivery and transform the country. Availability of electricity is a must. Without the uninterruptable electricity, the digital Bangladesh dream will not be fulfilled. Although the electricity production has increased and increased the electricity production capacity. Although the government are trying to solve this problem. However, still, people are facing load shedding in Bangladesh. Government need to take different initiatives to make a sustainable solution for the load shedding. At the same time, more investment and create new sustainable green energy need to solve this problem. On the other hand, the computer accessories price has been reducing whereas the user can buy at the chipper price and encourage them to use computer and Internet.

Lack of technological expert

To implement and transform society required a lot of information technology experts. Although many engineering universities have been established and produce many human experts, this number is not enough. At the same time, universities have to make qualified and expert IT engineers. Still, we are too far behind to export ICT facilities to other countries while our neighbor countries like India and other Asian countries like the Philippines earn multi-billion dollars by outsourcing. In this sector, the government needs to take necessary steps so that a large number of computer experts can engage in this sector.

Conclusion

Bangladesh wants to be a middle-income country, and it has already been accomplished different criteria of MDG to change the situation. Egovernance can be a powerful mechanism to change the socio-economic development condign in Bangladesh. Last consecutive year Bangladesh main the GDP growth. If the government can ensure transparency, accountability and people's participation, the scenario will be changed. Government need to take a severe initiate to transform the knowledgebased society. In all aspects of the government organization, necessary steps need to take. All for the government need to train so that they can use computer profoundly. At the same time, ICT education needs to be expanded all over Bangladesh. ICT training facilities have been available, and education needs to be chipper. So that reach and poor take ICT education regardless. To transforming a digital society, the government need to invest a lot of money. But it is complicated to allocate capital in this society as the government struggles to solve the social problem. However, the government need to fulfil its promise that Bangladesh will be digital Bangladesh by 2021. Government need to ensure citizen satisfaction by doing more straightforward public service. At the same time, public services need to be available and easily accessible for the people. Government need to make IT entrepreneur to catch the global market by providing different training. If the government can make this, then Bangladesh will be urn into modern technology-based countries.

References

Alam, M., & Ahmed, K. (2008, December). E-governance initiatives in Bangladesh. In Proceedings of the 2nd international conference on Theory and practice of electronic governance (pp. 291-295).

Banglapedia.(2014).Computer.Retrievedfromhttp://en.banglapedia.org/index.php/Computerfrom

- Bhuiyan, S. H. (2011). Modernizing Bangladesh public administration through e-governance: Benefits and challenges. *Government Information Quarterly*, 28(1), 54-65.
- Choudhury, S., Kala, C., Sarwan, J. P., & Kumar, S. (2010). E-Democracy and Citizen Empowerment through E-Governance and Other e-Initiatives in India, Nepal and Bangladesh-A Case Study. *Retrieved June*.
- De Kleine, A., Streifel, S., Ju Kim, E., Riordan, M., & Savescu, C. (2012) the e-government handbook for developing countries: a project of InfoDev and the Center for Democracy and Technology.
- Fasenfest, D. (2010). Government, governing, and governance. *Critical Sociology*, *36*(6), 771-774.

- Hasan, M. (2007). Public sector corruption in Bangladesh: Political and bureaucratic.
- Hasan, S. (2003). Introducing e-government in Bangladesh: Problems and prospects. *International Social Science Review*, 78(3/4), 111-125.
- Heeks, R. (2001). Understanding e-governance for development.
- Hoque, S. M. S. (2005). E-governance in Bangladesh: Initiatives and Challenges. *Bangladesh: Rajshahi University*.
- https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un /2016-Survey/E-Government%20Survey%202016.pdf
- Hussain, F. (2012). License Renewal of Mobile Phone Services: What a Country Should Not Do (A Case Study of Bangladesh). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2032127.
- Hussain, F. 2011. Telecom Regulatory and Policy Environment in Bangladesh Results and Analysis of the 2011 TRE Survey. http://lirneasia.net/wpcontent/uploads/2010/07/TRE Bangladesh 2011 FH.pdf,
- Islam, A. (1992). Foreign aid and economic growth: an econometric study of Bangladesh. *Applied Economics*, 24(5), 541-544.
- Khan, M. (2013). Bangladesh: Economic growth in a vulnerable limited access order.
- Khan, M. O. F. (2004). Information and Communication Technology (ICT): Status, issues and future development plans of Bangladesh.
 Paper presented at the South Asia Sub regional Economic Cooperation (SASEC) First Meeting of the Information and Communications Technology (ICT) Working Group.
- Knox, C. (2009). Building trust amidst corruption in Bangladesh. *The Round Table*, *98*(403), 449-459.
- Layne, K., & Lee, J. (2001). Developing fully functional E-government: A four stage model. *Government information quarterly*, *18*(2), 122-136..
- Lupu, D., & Lazăr, C. G. (2015). Influence of e-government on the level of corruption in some EU and non-EU states. *Procedia Economics and Finance*, 20, 365-371.
- Marche, S., & McNiven, J. D. (2003). E-government and e-governance: the future isn't what it used to be. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 20(1), 74-86.
- Minges, M., Raihan, A. and Raina R. 2011. Bangladesh: Access to Information (A2I) Evaluation. Access to Information (II) e-Service delivery for transparency and responsiveness (Support to Digital Bangladesh). https://a2i.gov.bd/wp-content/uploads/2017/11/1-Strategy_a2i_Phase2-2012.pdf.

- Misra, D. C. (2006, February). Defining e-government: a citizen-centric criteria-based approach. In *10th National Conference on e-Governance* (pp. 1-11).
- Mistry, J. J., & Jalal, A. (2012). An empirical analysis of the relationship between e-government and corruption. *International Journal of Digital Accounting Research*, 12.
- OECD. (2003). OECD e-government studies the e-government imperative. OECD Publishing. https://www.oecdilibrary.org/docserver/9789264101197en.pdf?expires=1598423050&id=id&accname=guest&checksum=1 B88903CDEA2B905435B569A40D9FE69.
- Palvia, S. C. J., & Sharma, S. S. (2007, December). E-government and egovernance: definitions/domain framework and status around the world. In *International Conference on E-governance* (Vol. 5, pp. 1-12).v
- Pani, N., & Mishra, S. S. (2009). E-governance. Himalaya Publishing House. 80-134
- Panzardi, R., Calcopietro, C., & Ivanovic, E. F. (2002). New-economy sector study electronic government and governance: lessons for Argentina. *New-Economy Sector Study: Electronic Government and Governance-Lessons from Argentina Retrieved*.
- Parvin, M., Salam, G. M., & Alam, G. M. (2011). The role of ICT in business ethics courses: Evident from Bangladesh. *African Journal of Business Management*, 5(11), 4164-4175.
- Rahman, M. L. (2016). e-governance and Bangladesh. The Daily Star.
- Rhodes, R. A. W. (1996). The new governance: governing without government. *Political studies*, 44(4), 652-667.
- Riley, C. G. (2003). The Changing Role of the Citizen in the E-governance and E-democracy equation. *Commonwealth centre for egovernance*.
- Saxena, K. B. C. (2005). Towards excellence in egovernance. International Journal of Public Sector Management.
- Sriramesh, K., & Rivera-Sánchez, M. (2006). E-government in a corporatist, communitarian society: the case of Singapore. New Media & Society, 8(5), 707-730.
- TIB (2016), Corruption Index, Trsanperancy Internationa Bangladesh. https://www.transparency.org/en/countries/bangladesh#
- TIB corrption Index 2015, Bangladesh 13th most corrupt. The Dialy Star, https://www.thedailystar.net/backpage/bangladesh-13th-most-corrupt-208522