Chapter 6
Administrative Efficiency and Effectiveness with the Application of E-Government: A Study on Bangladesh Public Administration

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Abstract Administrative efficiency and effectiveness is the key to positive administrative changes. Notably, most government in developing world have lack in efficient and effective administrative mechanisms to meet the citizen demands. The governments have a promise to gain administrative efficiency and effectiveness with substantial administrative changes. Information and Communication Technologies (ICTs) are considered as one of the most important tools behind these changes. ICTs can leverage the concept of online or e-government where citizen can be a part of government and actively participate to its functions to make the administration effective and efficient. However, the administrative systems in the developing world are more often reluctant in communicating with its customers and getting feedback from them for positive administrative changes. The application of e-government has failed to achieve its goals due to rigid administrative approach in these countries. Bangladesh is not an exception where government has introduced e-government with a bunch of positive visions without supportive administrative systems. This paper finds some loopholes and crucial reasons of failing to achieve the efficiency and effectiveness in the administration of Bangladesh.

Keywords E-government • ICTs • Efficiency • Effectiveness • Bangladesh public administration

1 Introduction

The efficiency and effectiveness of an administration depends on multifarious variables that should be carefully monitored by the administrators. With the demand of time and the necessity of administrative modernization, these variables have been replaced by the new one. An example of the administrative modernization process is the New Public Management (NPM). In the early 1980s of last century,

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NPM has been considered as the most innovative appliance to replace the old administrative system. However, it has been noticed that except some developed countries, most of the countries in the world have become unable to install NPM into their administrative mechanisms [1]. In principle, most of the innovations have been initiated in order to improve administrative efficiency and effectiveness. However, in most cases changes in the efficiency and effectiveness remain unseen and the innovations have been remarked as failure [1, 2].

The process of administrative modernization cannot remain stagnant for failure in innovations, rather the development process is to be continued with alternate technique. A new tool with new hope using the most vibrant ICTs application called e-government has been introduced into the process of administration. E-government has been incorporated into public administration in the later part of 1990s [3–5]. Analysts [6, 7] believe that the benefits of e-government are enormous and administrative modernization process is very much possible with the application of e-government. If we focus on the specific benefits of e-government, we would notice that the efficiency and effectiveness of administration is the logical sequence from the application of ICTs into the administration where citizens and other parties can interact for mutual benefits. However, this has been considered as a failed initiative for most of the administration in the world [8]. The reason of this failure, could be assumed as because of rigid administrative approach in citizen participation, and the overall vision of e-government being obscure to the administrative staffs.

Since e-government is initiated by the government, so, the government should be aware of the vision that e-government has been incepted for. Moreover, the administration should have to be well trained for the achievement of e-government targeted goals through changing rigid administrative systems and establishing multi-sectoral communication methods.

2 Objectives and Methodologies

The OECD E-Leaders conference [7] formulated four directives for the future e-government agenda:

- Increasing coherency and integration of the public sector through IT,
- Citizen-centricity of the public sector,
- Local service delivery,
- Globalization of public services.

Here, emphasis has been given on the citizen-centric public services for the national and global users using ICTs into the administration. However, ICTs itself cannot gain the expected e-government benefits. The administration needs to be efficient and effective in communicating and promoting available citizen participation into their services. In this regard, the government should focus upon the coherent administrative approach to gain administration effectiveness and efficiency. The administration in developing countries, particularly Bangladesh

public administration, are expecting to offer their services online since they have initiated e-government into the mainstream of government administration. However, their success is minimal due to bureaucratic and strategic reasons.

Considering the above scenario of e-government, the main aim is to see how the government has planned for the implementation of e-government to gain administrative efficiency and effectiveness in the long run. In order to have an insight into the subject, the objectives are to see how government has set the strategies for different e-government modules, such as the application of ICTs, human resource development, change of management to ensure citizen participation and make the administration open for all with available services.

This is a qualitative research where data has been gathered from the secondary sources, i.e., from books, journals, reports, web-sources, etc.

3 Theoretical Background

Administrative process, all over the world, has been greatly impacted by the evolution of ICTs. Although unknown in the 1970s, ICTs have been incepted into the mainstream government operations in early 1980s [9], however, e-government has been coined into government and its management since the 1980 [10]. Eventually, the momentum of e-government has been spread worldwide basically in the field of public administration since the late 1990 [11] Therefore, since late 1990s of the last century, governments all over the world have paid their proper attention on the application of ICTs in the mainstream of their administrative process.

3.1 ICTs into Government

ICTs have been considered as the fundamental tools for the success of e-government. However, use of ICTs along is not a solution for gaining efficiency and effectiveness among the administration. The administration should develop, in one hand, human resources through available training facilities, on the other hand, management should have proper spaces to work as a responsible body for the delivery of public services. The most important factors behind the success of e-government might be the creation process: plans and strategies must be proper for the context i.e. the readiness, to get the expected outcomes from e-government [12–14]. In this section these issues has been elaborated and explained with other related factors of e-government.

Before we go into the deep of how e-government plans and strategies facilitate ICTs and other readiness for achieving targeted outcomes, here, it is important to focus upon the incremental benefits from the application of e-government. The e-government is supposedly considered to bring forth the following benefits [2, 6],

- Improving services to citizens;
- Improving the productivity and efficiency of government agencies;
- Strengthening the legal system and law enforcement;
- Promoting priority economic sector;
- Improving the quality of life for disadvantaged communities; and
- Strengthening good governance and broadening public participation.

If we go through the benefits targeted to be obtained from the application of ICTs into the government it would be noticed that all these benefits are impossible without efficient and effective administrative process. That means proper plans are very necessary for meaningful implementations and successful outcomes. Put together it appears that a successful e-government initiative needs some background work called creation process, context, and the content. Therefore, before starting e-government application a government should focus upon this issues.

Context is considered the general condition, for example, organizational culture, electronic knowledge of employees, technological requirements, and administrative maturity of the realization of e-government. The creation process, on the other hand, indicates the method of determining the progression of content where content is the general indicator of e-government assessment, such as efficiency, citizen relationship management, electronic trust, and e-justice. The creation process relates to policy-making, developing strategy, identifying expected functions, identifying critical success factors and barriers to developing architectural structure, selecting methods of implementation, and evaluating results [15].

Government mainly starts e-government application following different implementation phases of digital efforts. The necessary digital efforts could be focused in different ways [3]. The ways could be in the 'back end' of the administrative organization and processes associated with e-government initiatives. This mainly relates to the reform effort of the public sector with 'digital divides' to decrease the gap between those who are able to access, create and use information through ICTs and those who are not. Digital divides are basically to support the front end through the open government data via portal where portal is considered as the most popular one stop service point that facilitates primary website for e-participation. In order to make portal as a means of connecting government with its customers through the online structure with integration of both horizontally and vertically service delivery, the portal should be regularly monitored and researched thoroughly.

Meanwhile, digital efforts should have proper plans and strategies to turn the system of governance from ineffective to an effective and efficient type [16, 17]. The notion of digital effort through the term e-government is to make the government not only transparent and accountable but also to produce competent administrative institution through their effective and efficient institutional practice [11, 18]. Recent study shows that almost every part of the developing world has been administered by an old system of administrative procedures [19]. However, the importance of substantial administrative changes have been raised by people of their own, by the community, and of course by the academics all over the world.

3.2   E-Government Trend Towards Administrative Change

In early age, bureaucratic organizations have different kind of orientations and scales of measuring the effectiveness and efficiency. Theoretically, these orientations have changed with the change of time and demand from the society. In early bureaucratic age the context of bureaucratic organizations had some basic features as explained by Jain [20]:

1. Bureaucracies had a formal and clear-cut hierarchical structure of power and authority;
2. Bureaucracies had an elaborate, rationally derived and organized division of labor;
3. The governed process of bureaucracies were set by a general, formal, explicit, exhaustive and largely stable rules that were impersonally applied in decision making. Furthermore, all decisions and communications have been recorded in permanent files and such records were used to refine existing rules and derive new ones.

Based on the above features it could be seen that bureaucracy (basically in old administrative system) was to maximize administrative efficiency only within their given structures. They were not accountable to the citizen, whereas, they used to serve their superiors. With the change of time the scenario changed with the availability of computers and other advanced electronic gadgets. Governments felt the necessity of using these tools into their system to cope with the new era. As a result, governments started reforms and incepted ICTs into the administrative process to change the old administrative system and make the administration efficient and effective. Primarily, the outset of ICTs into government was for the electronic commerce to deliver services to the citizen 'on-line' [10]. At present, ICTs have been considered as the media to shift the ownership of government to external users with the digital entities by an efficient and effective administrative system [3].

An effective and efficient administrative system can never be possible only with incorporation of digital entities. Prior to putting attention on digital entities an important task is to make the administration ready so that they can proficiently handle ICTs and achieve the respective goals. Moreover, an elaboration on the digital entities are required with mentions of plans, strategies and how to explore maximum benefits. As the plans and strategies of ICTs are for the success of e-government, hence the success of e-government is dependent on the different approaches of administration and governance.

Before the evolution of ICTs into the government and its administration the functions of administration were governed with four types of governance models: hierarchical model, rational goal model, open systems model, and self-governance model [21]. In the hierarchical model, the total control of policy development and implementation is restrained following the strict bureaucratic hierarchies. The rational model, on the other hand, disperses the power across the wide range of

agencies rather focusing on the hierarchical model. The open system model is more dynamic and can constantly be reshaped to respond to new challenges and demands. The self-governance model focuses on the relationship between state and government rather limiting notion of governance of action of the state only.

In order to shift from traditional governance system to e-government, four typologies in e-government approaches are available in practice [2]: such as reform oriented e-government, authoritarian e-government, managerial e-government, and open e-government.

Reform oriented e-government generally promotes the involvement of all social actors, e.g., citizens, business, etc. It is worth mentioning that the traditional system of administration follows vertical system of communication and considered as rigid and one-way service providing system. Moreover, in this system actors of different social sectors have been avoided or somehow neglected. Some countries have followed the traditional administrative system in a reverse way where citizen could be focused to initiate policies in case of public service through introducing bottom-up approach replacing the old top-down approach of communication system.

On the other hand, authoritarian e-government is mainly the application of e-government but not to shift power to the citizens or practice the process of democracy. Here, government mainly tries to establish strong communication system with the local government, so that, the central government could easily monitor their work and impose the decision taken by them. Moreover, this seems a top-down approach of controlling the whole government system. The system also controls the web from national and international access and favors the administrative systems for the economic and social growth of the country.

The managerial form of e-government utilizes the management system of private organizations to increase the economy, efficiency, and effectiveness. The main approach of introducing 'e' into the form of managerial type of government is to reduce the cost of staff by introducing the application of e-government.

Finally, the open type of e-government mainly focuses on the transparency, accountability, equity, and inclusion. The belief is that e-democracy is possible if the opportunity for equal right of participation could be ensured. After ensuring the participation of social actors government mechanisms will be transparent and accountable automatically. Ghosh et al. [22] suggested using 'open-source software' within the public administration with the slogan of everyone can get insight, everyone can give his or her contribution and everyone can change the result of decision. Moreover, open e-government combine institutional practice with cultural ethos in a contemporary democracy in order to safeguard the fundamental entitlement of individuals. It encourage the e-participation through the e-vote, and finally contribute to the process of drafting and implementing policies.

It is an obvious fact that e-government effort cannot be accomplished without the digital entities. Moreover, digital entities have benchmark to understand the highest level of e-government maturity. Scholars [23–26] have emphasized that in order to achieve the highest e-government levels a specific technological set-up should be beset. In principle, five e-government matured levels have been outlined by the scholars. The starting level (level one) has been termed where only web-link is

presented whereas in the highest matured level many other technological set-up, i.e., web, e-mail, digital signature, public key infrastructure, portals, secure sockets layer and other available technologies should be available to cross the departments and layers of government.

4 E-Government to Make the Administration an Efficient and Effective in Bangladesh

Before going through the details of e-government setup in the administration of Bangladesh it is necessary to outline the reform movement that has been started since its independence. Bangladesh has got its independence in 1971 from Pakistan. Since its independence different reform efforts have been pertained to generate an effective and efficient administrative system. At present, the country could be seen as a unitary administrative form of government. Prime Minister is the executive head of the country who along with his/her cabinet is solely responsible for overall policies and strategies. Subsequently, cabinet member are basically responsible for specific Ministry and has been assisted by a senior permanent civil servant known as secretary. The policies of the national administration is formulated by the Minister in cooperation of the secretary in the secretariat and implemented by the field administration [27].

Presently, the government of Bangladesh has four tiers of field administrations [28]. These tiers are named as the division, district, upazila/thana, and the union parishad. In Bangladesh there are seven administrative divisions and 64 district with several upazilas/thanas, and the union parishads. The administration is unitary in form and follow the instructions from the highest administrative authority i.e. secretariat; the field administration only implement polices without comments or any further recommendations.

If we go back bit upper-part of our discourse it would be noticed that after independence, Bangladesh initiated reforms to speed-up administrative effectiveness and efficiency. Therefore, e-government has been welcomed as a most vibrant reform effort to the administration of Bangladesh. Moreover, after the commencement of e-government in the later part of 1990s the government of Bangladesh has initiated and implemented various projects in cooperation with the donors (i.e. UNDP, World Bank, etc.) to promote administrative efficiency, effectiveness and to make the administration more transparent and accountable to the citizens [29]. Eventually, the present government took over power in 2009 and re-elected in 2014 with a slogan of 'Digital Bangladesh' to ensure the state services closer to the citizens. Accordingly, the government has been emphasizing on e-government in all of its administrative sectors.

The ICTs application in the administration of Bangladesh started in 1986 with a vision of transforming public services to the citizens and business, to promote democracy with achieving the highest level of transparency, accountability among

the government and its administration, to become a mid-income country enhancing the social equity. However, the first ICTs policy was formulated by the government of Bangladesh in 2002 with an aim of becoming an ICTs driven nation by the year of 2006 [30]. In order to succeed the ICTs policy 2002, government allocated 890 million Bangladeshi currencies (approximately US$12 million) in 2003 [4]. However, it has been noticed that after 6 years the outcomes were very minimal compare to its expectations. Some reasons of the poor outcomes was pointed out by the Ministry of Science and ICT, [30] as:

1. Underdeveloped internet facilities: the government of Bangladesh has very limited internet facilities to operate their functions online,
2. Inability of responsible authority: The authority responsible for ICTs and the related issues has inability to achieve the goals of the ICT policy 2002,
3. Inadequate capacity: Due to the lack of infrastructure to harness the benefits of ICTs for improving the management and the processes of public sector ultimate goal still in question,
4. Limited usability: Due to the small access of internet and e-mails of civil servants the vast e-government application in administration is limited,
5. Improper planning: The ICTs planning and its strategic actions are not properly maintained for the overall success of ICT policy 2002.

To overcome the identified problems, the government of Bangladesh took two new partners Spinnovation and DNet to develop a short, medium, and long term National ICT Action Plan or Roadmap for Bangladesh on the basis of the National ICT Policy 2002 [30]. A detail action plan was drafted by these two partners and in 2009 the government adopted a revised plan emphasizing the following issues [31]:

• Expand and diversify the use of ICTs to establish a transparent, responsive and accountable government;
• Develop skilled human resources;
• Enhance social equity;
• Ensure cost-effective delivery of citizen-services through public-private partner-ships;
• Support the national goal of becoming a middle-income country within 10 years and join the ranks of the developed countries of the world within 30 years.

The adopted revised plan basically required to make the government more open and create an atmosphere to promote e-government [32]. In principle, this revised plan was undertaken in two movements in cooperation with the UNDP (United Nations Development Program). These two movements are: Firstly, Assistance to SICT project (taken in the 2002 policy as SICT), and secondly, Access to Information (A2I). In short, A2I is for the administrative efficiency generation through the facilitation of online-services to the citizen and other stakeholders of government. The vision of the ultimate success of e-government application and its outcome has been targeted by the year 2021.

The government, particularly the Prime Minister office, is working in cooperation with the UNDP to utilize ICTs tools to increase socio-economic development by the year 2021, consists of four pillars: (i) Developing human resources for the twenty-first century, (ii) Connecting citizens in ways that is most meaningful, (iii) Taking services to citizen's doorsteps, and (iv) Making the private sector and market more productive and competitive through the use of ICTs [29]. Although the growth of e-government in Bangladesh is very slow considering the world e-government development ranking. However, the government has still a very positive approach to make e-government a successful one with increased efficiency and effectiveness of the administration.

5   Discussion

Application of e-government, especially in developing countries, seems that just like many other management doctrine, has spread through simulation or hype [19]. Moreover, still in most parts of the world e-government has been considered as the means of ICTs installation. The concept is persisting in same fashion even though the potential changes have been recommended by scholars in the mainstream of e-government application. Eventually, it is very difficult to get benefit from ICTs without proper administrative changes. Therefore, changes are required both in the strategies and the actions for an effective and efficient government administration.

Government is an institution that has some specific goals to be performed for the betterment of its citizen through its administrative mechanisms. Although the main focus of government functions is between the government and its citizen, there are other important bodies to maintain strong communication for the utmost benefits from e-government. Seifert [33] in a study named Congressional Research Service (CRS) has outlined that in order for the success of the main purpose of e-government the interaction process should be maintained between government to government (G2G), government to business (G2B), government to citizen (G2C), and government to employee (G2E). However, it is very necessary to see how this communication is maintained or why.

If the communication is developed for the control of local administrative bodies by the central authorities then it would be a mistake in overall success of e-government [2, 19]. Moreover, the government particularly its citizen will be loser financially as well. The whole invested money will be wasted without sufficient outcomes. This scenario has happened in the first ICTs policy 2002 of Bangladesh government. The government has initiated ICTs policies with strong hope that they would be able to make a democratic government atmosphere. However, nothing remarkable development has been seen after a specific time frame of the initiated policy. Moreover, under the same administrative condition the government announced a new policy with new hopes. The only noticeable change is that two new committees have been appointed to find a new way of investing more money.

The visible landmark, since the massive ICTs application in the government of Bangladesh administration, are different phases of creating the task forces, policies, action plan, Acts, visions, etc. However, the main action plan has remain unchanged and persist in same manner as has been in the old administrative system. After the failure of first ICTs policy, the government has announced new policy to make a transparent, responsible, accountable government through the skilled human resources, enhanced social equity, and especially through public-private partnership. However, in order to succeed all the goals, a strong and well trained management is very necessary that is unfortunately missing in Bangladesh. In most cases it has been noticed that there are very limited training facilities provided by the government and the most training centers are based only in the capital city, Dhaka [34]. Therefore, local bodies, mainly related to the implementation of government functions, are not gaining the required training and the ultimate goal of e-government remain unseen.

Moreover, the application of ICTs into government administration has brought some terminological changes. However, it is very difficult to say that terminology can be effective without any substantial administrative changes. The administration practiced traditional system for long time, hence due to lack of attitudinal change, the application of ICTs into mainstream government administration has changed the way of old administration into the fast method of that old system. For example, if we go through the hierarchical model of traditional governance system we would see that the application of ICTs only changed nothing more than from a paper based communication to an online communication system. However, the main target of e-government is not to fasten the process of communication between administrative mechanisms. Moreover, the seamless communication between government administrations with its stakeholders, especially with citizens, has been considered as the main target of e-government applications.

The traditional administrative system is vertical in communication with the management and stakeholders. However, the main target of e-government is to maintain horizontal communication [35] system where staff can work freely and share their thoughts without fear moreover stakeholders can participate in the decision making process of the government and its administration. Simultaneously, seamless services do not mean the services from government administration for the citizen and other stake holders. Moreover, in order to be matured enough for the success of e-government, technological setup i.e. web, e-mail, portal should be used and both-way communication process should be established.

With the traditional management system the administration can never be effective and efficient in installing e-government and gaining benefits from it even if the government spent huge amount of money. Before start-up the process of e-government, government should decide the expected benefits they are going to achieve. Moreover, the specific planning systems should be identified for the overall success. Without proper plan and strategies the implementation cannot be made in proper way and successful outcome is impossible. Governments all over the world, before going for any plan, should set the strategies and the outcomes in

a prudent manner. In order to benefit from any application, three most important factors, such as the strategies, implementation, and outcomes should be treated with equal priorities.

6   Conclusion

Administration has been considered as most important part of government operations where the success of e-government is dependent on proper functionalities by the administrative bodies. The way of operating administrative functionalities are considered as administrative approach. The government of Bangladesh has taken policies and strategies for the success of e-government. However, e-government success is not possible without the substantial administrative changes. Moreover, the administrative effectiveness and efficiency cannot be gained with the traditional administrative approach. Eventually, the government strategies should take into serious consideration to cope with the actual demand of e-government.

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