

# Readiness assessment of e-government: a developing country perspective

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## Abstract

**Purpose** – This study aims to describe an assessment methodology of e-Government readiness through an empirical study that investigates collaborative needs in operating effective governance at root-level public service delivery in a developing country context. Broader methodology that accommodates collective functions of the government should be used while assessing the readiness of e-Government implementation.

**Design/methodology/approach** – The study is based on interview data collected from a total of 13 government officials, 21 elected representatives and 106 targeted citizens in the local government of Bangladesh.

**Findings** – Through a qualitative case study, this paper empirically investigated a proposition of e-Government readiness within local government cases. The findings of the study may help rectify existing assessment methodologies in e-Government implementation.

**Research limitations/implications** – The data analysis used a collaborative perspective subjectively rather than focusing on the objective manner to capture technological aspects.

**Practical implications** – This finding could benefit various e-Government initiatives in developing countries, especially for addressing critical collaborative needs of e-Government implementation.

**Social implications** – The findings of the paper represent social perspectives of new e-Government system implementation.

**Originality/value** – The study proposed a holistic methodology of e-Government readiness assessment that can broaden existing assessment methodologies.

**Keywords** E-governance constraints, E-governance readiness, Participatory governance

**Paper type** Conceptual paper



## 1. Introduction

Electronic Government (e-Government) has become a well-recognised research domain in information systems research. The terms digital government, electronic government and e-Government have frequently been synonymous in prior studies, as these are all about the use of information and communication technologies (ICT) in improving public service deliveries. Regardless of these terminologies, e-Government can be viewed as a prominent strategy for transforming administrative activities to improve quality of service deliveries, decentralisation in public administration (Prybutok *et al.*, 2008), financial savings and the effectiveness of government programs (Garson, 2004;

Karunasena *et al.*, 2011). Realising these strategic benefits, prior studies have explored a range of directions in e-Government research such as *readiness of e-Government* (Kaplan and Maxwell, 2005; Koh *et al.*, 2008; Shalini, 2009); *application development of e-Government*, such as public administration (Gamper and Augsten, 2003), social security card system (Gil-Garcia and Pardo, 2005), e-stamping service (Reddick, 2005) and policy services in rural courts (Heeks, 2001); *success of e-Government* (Gil-Garcia and Pardo, 2005; Sharifi and Manian, 2010); *citizen involvement in e-Government* (Reddick, 2005; Velsen *et al.*, 2009; Verdegem and Verleye, 2009); *new public and administrative management of e-Government* (Jones *et al.*, 2007); and *adoption of e-Government* (Chan *et al.*, 2010; Lean *et al.*, 2009). Among all these studies, research on e-Government readiness is paramount because all other research and government initiatives would not add value to the government's transformation without assessing a readiness of the government prior to its implementation. Previous e-Government studies have suggested that limited methodologies result in unsuccessful implementation across government and public strategies (Koh *et al.*, 2008; Lee *et al.*, 2008). Moreover, e-Government readiness is not limited to only assess the readiness of government officials and government systems but to also assess the readiness of all stakeholders including citizens in a holistic integration to transform a traditional government system into an e-Government system (Grindle, 2004; Jones *et al.*, 2007; Kanat and Ozkan, 2009; O'Flynn, 2007; Orange *et al.*, 2007). The central focus of this study is to uncover this issue.

In information systems (IS) development research, the development of organisational readiness has been described as a benchmark that assists in identifying potential blockages to the effectiveness of new system implementation. McKersie and Walton (1991) described that different types of IS solutions may require unique patterns of motivation, competence and coordination of groups and individuals involved in the process of implementation. This case is very common for pre-implementation attitudes and organisational readiness for implementing e-governance (Abdinnour-Helm *et al.*, 2003; Stewart *et al.*, 2000). Thus, improvements in the e-Government implementation process through the analysis of appropriate readiness would reduce costs and enhance adoption for business benefits (Abdinnour-Helm *et al.*, 2003; Stewart *et al.*, 2000). In this aspect, current e-Government literature has identified interacting soft concepts such as organisational culture, leadership, change management and risk orientation. Motivated by this research, we designed a research case that has the goal of appropriate readiness assessment for e-Government implementation. The objective of this study is to explore issues in e-Government readiness assessment in a developing country context, in which we focus on a collaborative perspective that should be included in assessing e-Government readiness.

The rest of the paper is organised as follows: the next section provides details on the background literature of e-Government research and the importance of assessing a government's readiness using a holistic approach. Subsequently, the methodology used for conducting our study is included with case context. Next, the conceptual understanding compared with Koh's *et al.* (2008) model is presented with its applications for assessing readiness. The following section provides details of the model evaluation and qualitative findings from our empirical investigation. Finally, the overall discussion and conclusion summarise the key contributions and further research from this study.

## 2. Research background

The current body of e-readiness studies in the domain of e-Government research has been explored using different methods and limitations of methods in justifying appropriate preconditions of a country's readiness (Koh's *et al.*, 2008; Shalini, 2009). Potnis and Pardo (2011) genuinely claim that the comparison between different assessment results is almost impossible because of inconsistency in assessing e-readiness across the global. Various frameworks for assessing the level of readiness have been proposed over the past decades. Prior research initiatives have identified many factors that affect e-Government development. Such factors include technical, political, organisational, managerial, regulatory (Miah, 2012), institutional, environmental and strategic concerns, in addition to human factors including users' opinions/criticism, people's beliefs, communication and acceptance (Gil-Garcia and Pardo, 2005; Mahler and Regan, 2002; Miah, 2012). Table I shows the comparison between different research studies, particularly focusing on consideration in assessing e-readiness.

This table shows that the trends of assessing e-readiness has been shifting from more technology assessment to operational assessment, focusing on delivering according to citizens' needs. This trend has also been reflected in the United Nations e-Government Survey and e-Government Development Index. In 2003, the index included telecommunication infrastructure and technical manpower as the most vital factors for e-Government readiness, while, in 2012, it focuses on greater citizen participation and social inclusiveness as important factors for e-Government readiness (Almarabeh and Adwan, 2013).

Koh *et al.* (2008) examine the readiness by identifying how information technology (IT), strategic planning processes and relevant stakeholders interact in an emerging e-Government system. This research is important because most of the e-Government systems require fulfilling a strategic need and as such must involve a significant process of citizen-centric e-readiness assessment. Strategic readiness is defined as a state of permanent and organization-wide preparedness for such a large-scale systemic change that occurs in the e-Government. Because of the central roles that ICT plays in transforming governments today, a significant part of the strategic readiness stakeholders (people related to the e-Government system) and their alignment with government businesses is critical to the overall readiness and, in turn, for successful implementation of e-Governments. Compared to other methods defined in Table I, the model proposed by Koh *et al.* (2008) adopted a broader lens to assess the government preconditions. The main aim of Koh's study was to focus on the practice of technology management within the relationship between citizens and government bodies. Within this model (that integrates the three key functions: informational, transactional and operational), the operational functions facilitate citizen-oriented operations that allow access to government information [Figure 1(a)].

In the domain of public service delivery, consultation among citizens, politicians and civil servants also affects the design and development of e-Government, which is related to the role and function of IT in public organisations (West, 2007). This implies that e-Government research, particularly in readiness assessment, needs to accommodate collaborative elements through a broader approach to assess readiness on pre-conditions to the implementation of various e-Government applications (Heeks, 2001).

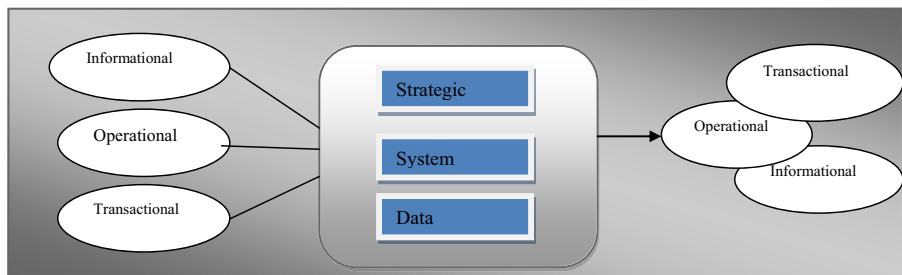
Studies on readiness assessment	Key components	Rationale
Alghamdi <i>et al.</i> (2011)	The readiness of e-government is focused on technical aspects such as ICT strategy, user access, e-government program, ICT architecture, business process, ICT infrastructure and human resource	Considering technical aspects of an organizational perspective
Al-Omari and Al-Omari (2006)	The readiness of e-government is focused on six aspects: organizational readiness, governance and leadership readiness, customer readiness, competency readiness, technology readiness and legal readiness	Considering legal necessities
Azab <i>et al.</i> (2009)	The readiness of e-government is focused on appraisal framework encompassing aspects related to citizen, technology, processes and strategic planning. The assessment highlights the relations and interactions of these components in an emerging e-government environment	Considering assessment in relation to electronic management
Höcht <i>et al.</i> (2011)	E-government readiness focuses on technical, political, legal and socio-economic factors	Considering social context and cost of electronic services
Karunasena <i>et al.</i> (2011)	The readiness of e-government focuses on security of public information, creation of public values and availability of communication technologies	Emphasised creation of public value for citizens
Almarabeh and AbuAli (2010)	The readiness of e-government is focused on three main aspects related to what, why and how e-government? The answers to address these concerns summarized in giving different definitions, maturity for e-government, addressing issues and opportunities for developing e-government and discussing different factors for achieving the success for e-government and the role of ICT	Considering to raise the level of government performance
Almarabeh, and Adwan (2013)	E-government readiness is focused on United Nations indicators including cost and efficiency for electronic services to the citizens	Considering low cost and more efficient electronic services to the citizens
Shalini (2009)	Focuses on barriers to e-government readiness and found resistance to change, static websites and a lack of awareness and trust in online public services are causal elements for slow progress	Considering citizen awareness for assessing e-readiness
Elsheikh <i>et al.</i> (2008)	The readiness of e-government focuses on bureaucracy, lack of accountability and transparency and lack of citizen participation in e-government process	Considers citizen participation as a factor for e-government readiness
Potnis and Pardo (2011)	E -government readiness focuses on different indicators, including three secondary indicators. These are risk-to-reward indicator, adoption indicator and satisfaction indicator	Considers citizen satisfaction of electronic services as an important factor for e-government readiness

**Table I.**  
Comparison on some  
example methods of  
e-readiness

Some other studies have also measured e-Government readiness based on a citizen-centric approach. For instance, [Kalkun and Kalvet \(2002\)](#) assessed the citizens' e-readiness despite the fact that their opinions are of vital importance for e-service implementation. This indicates that the importance of socio-cultural factors in accessing electronic public services is paramount in this area of research. While socio-cultural factors such as trust, networks and educational qualifications always remain of interest to researchers, government systems including mindsets and attitudes of their officials, relevant authorities and public leaders on the use of electronic services are also important to assess the overall readiness in a collaborative manner. They all play essential roles in establishing a new government, ensuring the use and delivery of electronic public services ([Waheduzzaman, 2010](#)).

The above analysis reveals that the existing methodologies in assessing e-Government readiness seem incomplete, as they have not focused on gaining the status of collaborative requirements. Government offices and their officials may have well-designed portals and also information about local needs, but that does not guarantee fulfilment of local citizens' needs. Beyond the informational and transactional functions, government officials may have information about local needs but a guarantee is required as to whether any solution of those needs has any demand among the local citizens. If the content of the e-Government is being prepared without assessing the local citizens' requirements and capabilities, then there is no guarantee that local citizens will use the information systems or solution. This problem may only be solved by addressing the collaboration between local citizens and local government officials. In this respect, we consider an additional functional element that is included in Koh's model which will focus particularly on the need for collaboration. We term this element as "congregational"[1]. This functional element will outline who will be involved in this collaboration, when they will be involved, how they will be involved and what legal instruments are required to ensure effective collaboration in order to establish the e-Government function.

[Koh et al. \(2008\)](#) identified that the importance of the integration function between informational, transactional and operational. It is suggested that this classification provides a concise outline that allows e-Government planners and administrators to take a broader assessment view of an increasing and changing array of e-Government applications. However, there is a gap in incorporating specific aspects of collaboration into the integration function to enable a broader viewpoint that may allow e-Government managers to recognise and focus on a set of critical issues specific to each



**Figure 1.**  
Initial integration  
function in  
e-government  
readiness assessment

**Source:** Kaplan and Maxwell (2005)

category Koh *et al.* (2008). This gap could be addressed through the analysis shown in Figure 2.

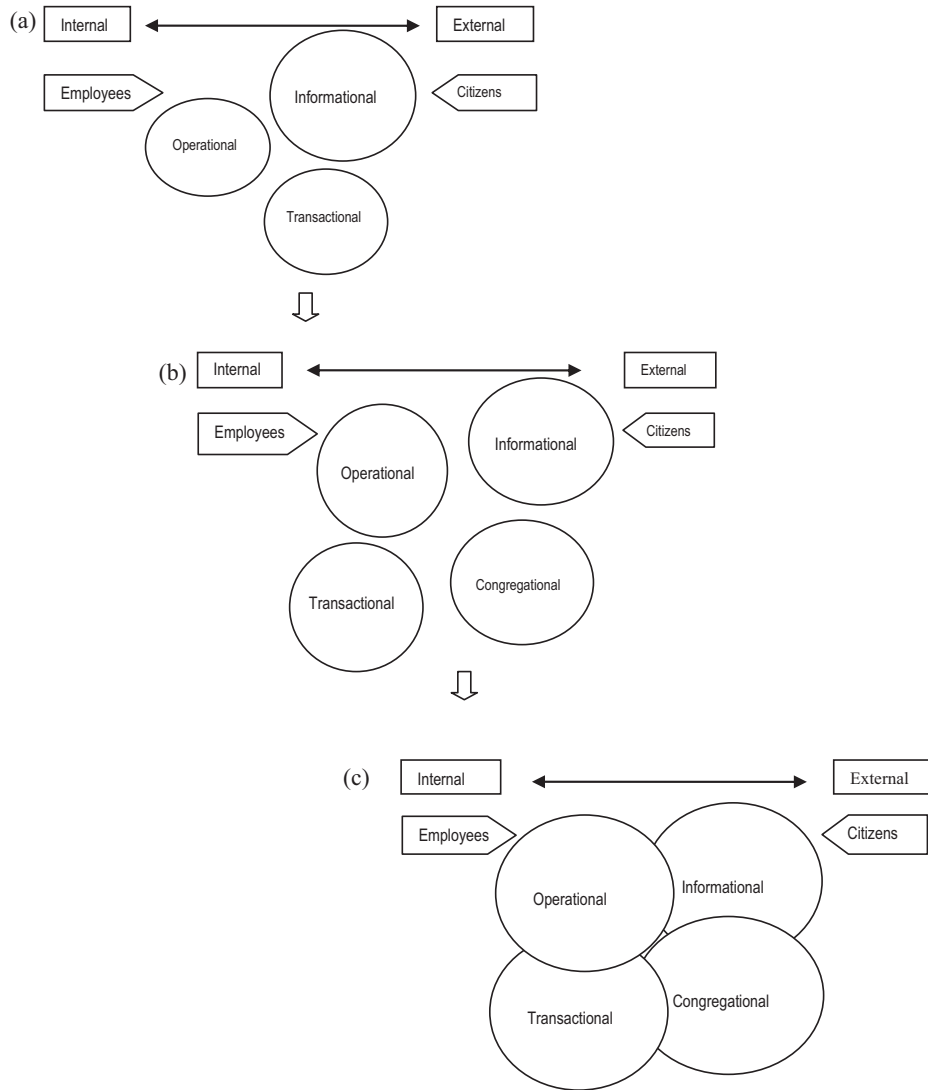
In Figure 2, the congregational function can be seen as providing assistance to stimulate operational and transactional functions in e-Government applications through the interactions between all relevant agents including citizens. This enhances the overall e-Government services as well as informational functions for citizens. These four functions are described briefly in Table II.

Our empirical research investigates the integration (e.g. network) between citizen and the government in local governance practice in particular, during the implementations of local development programs. In the first phase, we look at the current status of the operational function and subsequently rectify Koh's assessment model; our study goes beyond this by enhancing the integration functions. We focus on the e-Government function of collaboration for better integration between government and citizens. Particularly, it focuses on creation of the citizen forum, ask for citizens' feedback, online networking and trust in each other and relational dimension of overall e-readiness process. The key argument is that the collaboration function must be under the readiness assessment strategy of e-Government implementation.

### 3. Research methods

A qualitative method was used to assess the status of holistic integration and readiness of all stakeholders in embracing the new governance system. Three Bangladesh local government institutions were selected to conduct our case study research in 2009. First, a local development project, namely, the "Rural Growth Centre (rural market) Development Project" (ADB, 2006a, 2006b) from each of three selected local government bodies (Upazila) in Bangladesh was selected. A second phase of the case study was conducted in 2010 to explore the collaborative mechanism in the governing system in implementing a project: "Primary School Development Project". Three primary schools from three other local government bodies were selected to conduct this study. Three data collection methods – interview, observation and document analysis – were adopted to conduct this research. Government officials from local (Upazila) to top ministry levels, locally elected representatives, targeted citizens and those who had a role in the implementation of selected development were interviewed.

In total, 13 public officials, 21 elected representatives (three individually and three in a group of six) and 106 expected beneficiaries (targeted users) were interviewed in six focus groups and two cross-groups (see the diagram of overall research in Appendix A1). All together, 27 interviews were conducted. Different semi-structured questionnaires were used for different interviews. Previously used procedures by different organisations such as Asian Development Bank and Ministry of Planning (ADB, 2006a, 2006b; IMED, 2006) for assessing local participation were used to frame questions for interviews. Selected schools and markets were also physically observed along with the targeted users to observe their present status of uses. The interview method was selected, as it is found to be suitable for data collection in developing societies. The tape-recorded interviews were transcribed into text manually. The interview texts were then organised under different broad descriptive codes using the NVivo software to perform the analysis. Text from similar questions across the interviews was used as code to organise the data under separate nodes. Some examples of such codes are: participation, accountability, transparency, leadership,



**Figure 2.**  
E-government  
function integrations

**Notes:** (a) All functions are disintegrated; (b) all functions are integrated through congregation; (c) all functions are integrated effectively

service-delivery and values. The nodes were then fleshed out, as text/data referring to the same theme were taken out from each node. The names of such themes are perception, trust, power, awareness and relationship. These coded data/nodes were then organised hierarchically according to themes as “tree nodes” to address the research question. This hierarchical coding allowed the researcher to analyse texts at different levels of specificity. Different thematic quotes and texts were then used to run “queries”

Functions and their definitions	Uses of e-governance system
<i>Informational functions:</i> Government's information/database required for citizens	Online publishing Historical information Broadcasting and forecasting Local awareness and notifications of government services
<i>Transactional functions:</i> Features for the activities of government officials to take the information to the incumbents	Online procurements Online bidder applications Collections of taxes, fees and penalties Payments of service providers
<i>Operational functions:</i> The system or policy works to transact data to citizen	Online citizen's services License/permits application Data entry for national ID card and passport application e-voting Scheme for delivering government subsidies Management of emergency services
<i>Congregational functions:</i> Features for the collaborative activities of government officials and citizens in governance	E-mail circulations Group email management and monitoring Feedback tracking and delivery Online survey for root-level engagement Creating online forum and community Overall evaluation of the collaboration and collective opinion

**Table II.**  
Uses of the four functional elements for successful e-Government application (Adopted and extended from Koh *et al.* (2008)

function within NVivo to ensure that the various themes were distinct from each other and find out the frequencies of responses to a particular theme (separate snapshots of Word Query, Code Query and Theme Query are presented in Appendix A2).

#### 4. Initial findings

Responses from different stakeholders regarding the code of participation indicate that holistic integration is absent in Bangladesh. Neither the elected officials nor the government officials are ready to use new governance systems to integrate local citizens in the government network. In reply to the question of whether officials invite online opinion from local citizens, one elected officials expressed:

People elected us to look after all the 'positives and negatives' that affect them, so I don't find any further need to ask every person about their opinion.

This statement reveals that elected officials do not perceive any value of direct citizens' participation in the governance system. Similarly, government officials were found to be not ready to include local citizens in the governance process. During interview, public officials were found not interested to form any online community forum for better outcomes of development projects. For example, one government engineer said:

[...] we are working in this area and we know all the pros and cons better than local people and their representatives, thus we are the best section to identify and select any development project within this Upazila.

Similarly, elected representatives are also found to be unwilling to form independent community forums. When asked about participation of community groups, the local



elected officials replied like government bureaucrats that *inviting people [for any decision] means inviting trouble*. One *Union Parishad* Chairman further added:

I don't want more independent management committees like SMC [School Management Committee]; because of SMC we, the Chairmen, may lose our authority over the local school.

The above data reveal that the government and elected officials are not concerned about including the community members in government networks. Because of this traditional bureaucratic mentality, the local government's programs are proving unsuccessful at local levels in Bangladesh. Tragically, these officials do not even bother to invite intended beneficiaries for any online feedback about their rendered services. During interview, one businessman vented his frustration over the newly developed rural market:

It spoiled our business; earlier I had a big shop at the middle of the market, and I used to get a big turn over. But, now I only have a small shop outside the periphery. People do not want to visit this side. I am thinking to move to a new market. I went to express my resentment about this poor work to our Chairman, but he is not interested to listen about it.

In the absence of any feedback system about the development projects in governance process, errors in the development works are often overlooked. A government evaluation of a German-assisted Primary Education Development Program has found faults in the construction of a toilet for a school immediately after the completion report submitted by the German consultant could provide a good example in this regard:

[...] two soak well for the latrine have not been constructed. It is informed during evaluation that a German engineer appointed by the local consulting firm has monitored this work. It is strange how these huge anomalies have been overlooked by the consulting firm (IMED, 2006).

These data indicate that the use of local knowledge or a top-down approach by the officials is not adequate to ensure better public service delivery. Because of informational, transactional and operational functions, local elected representatives and government officials provide citizen-centric services. However, those services have failed to fulfil citizens' expectation, as citizens were not fully integrated in the local development planning and implementation activities. During field research, it was observed that most business people are not using the newly built market shades. A true collaboration is thus required to fulfil local citizens' interests in designing new governance system like e-Government systems overall.

Koh's model proposes operational usages only to integrate local citizens with government offices, but it is still a top-down process of implementing e-Government application. The congregational function focuses particularly on citizens' integration in governing systems. The function defines the collaborative needs and valuing of local citizens' opinions using local knowledge, continuous involvement of local citizens and a robust network among all stakeholders. This also includes a proactive communicational function, action taking on feedback and creating a citizen's forum for encouraging engagement of citizens and civil society. These requirements never were under assessment prior to e-Government application implementation. To meet the collaborative needs, we identify the fourth functional element that is demonstrated in Figure 3 in which an e-Government assessment has been defined as an integration of the four functions (informational, transactional, operational and congregational) in which a

combined set of uses that is required for successful e-Government function is defined in Table II.

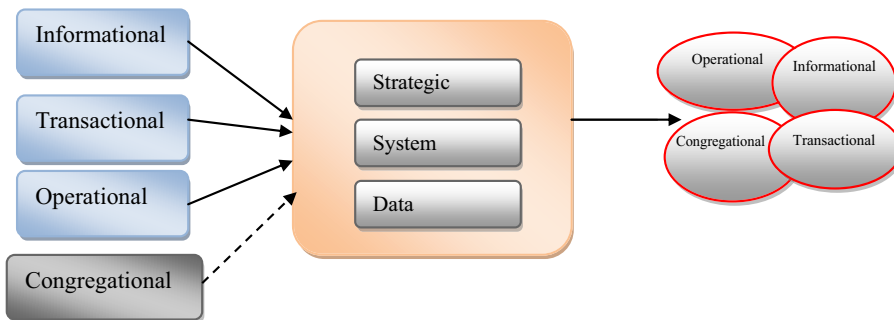
In a developing country context, despite well-established policies, e-Government services are still in their infancy. For instance, studies show that Bangladesh ranks 138 among the 150 countries globally for the level of advancement of ICT during the period of 2002-2007 (Khan *et al.*, 2012). However, presently, the government has introduced the National ICT policy and plans to establish Community e-Centres all over the country (Sharif *et al.*, 2007). The website of the Prime Minister’s Office has options to communicate public opinions. Regional educational and administrative bodies are facilitated with computers and Internet. Much internal automation is in progress to make effective ICT-enabled process implementation (ICT Ministry Bangladesh, 2012). Given this structural readiness, more studies are required to explore the readiness of all actors who intend to use and deliver public services in the country. More importantly, a study is required to observe how the information needs of the local users would be met through an e-Government system.

### 5. Impact assessment of the proposed rectification

To evaluate the impact of adding the collaborative element, we conducted case studies on a primary school construction in rural Bangladesh. According to the government rule, guardians of local students have to elect a School Management Committee (SMC) for their local school. Local citizens participate in all school affairs through this committee. Analyses of school cases show that proper involvement of local citizens helps to implement a development properly. Collaboration between local citizens and local government officials effectively helps to implement a pro-people development. Students’ guardians of a primary school expressed their satisfaction over their collaboration and development outcomes:

We are satisfied with the development of our school [...]. No one could do better than this. This is the maximum output that we can expect from a contractor [supplier]. The contractors and the officials always steal something from government funds so we do not expect a hundred per cent job through a government program. But what we have obtained regarding this school building is sufficient.

Local students’ guardians also mentioned that they were involved throughout the construction program of their school, and their SMC President also facilitates this participation. Because of established network process, intended beneficiaries are now



**Figure 3.**  
Proposed improved  
approach of Koh  
*et al.* (2008)  
assessment model

able to provide their opinions and feedback about any development project. Local citizens also conceded the importance of officials' pro-people roles and mindsets. During interview, local students' guardians described about the role of an elected leader which helped them to obtain better quality furniture for their school:

The local MP and officials came on the day of inauguration of the new building. We chanted repeatedly for good quality furniture. Actually our chairman told us to demand that, and we did so. The contractor [supplier] changed all of the bad furniture.

Thus, a trust-based collaboration between officials and local citizens is important to improve the governance system in the society. It also implies that elected leaders and government officials need to change their traditional mindset to make a governance process more effective. This research, has also found that local people are becoming more united and empowered because of collaborative activities in the governance system. One student' guardian expressed during a focus group interview:

Traditionally, we used to maintain distance from all kind of government activities, as we considered these are officials' job, and they will do it themselves. However, because of our chairman [previous local council chairman now president of the SMC, but people still call his as chairman] we understand our roles in local development projects.

The above analysis, thus, reveals that collaborative action is important for the readiness of all actors, e.g. government officials, elected leaders, business associations and local citizens, for a collaborative action that is of importance in establishing a new government system. Koh *et al.* (2008) informational function which focuses only on notification of government services to the local citizens would not bring any success to e-Government activities unless congregational functions run parallel. Through congregational functions, a trust-based relationship would evolve between service providers and service receivers, which, consequently, would encourage local citizens to come forward to engage them in completing transactional and operational functions successfully. Maybe this sort of encouragement is less important in developed or Western societies, where citizens are mostly empowered and direct involvement of local citizens is equally valued by government officials. In contrast, citizens in developing societies such as Bangladesh are not aware of their citizenry rights, and government officials and elected representatives are not willing to share authority with local citizens. Therefore, to achieve maximum outcomes from e-Government implementation in a society like Bangladesh, citizens need continuous participation with local government officials to develop information content that will serve their purposes.

## 6. Overall discussion and conclusion

The paper introduced a holistic view in assessing e-Government readiness through an empirical study that investigates collaborative needs in operating effective government in a developing country context. Prior studies of readiness were focused on assessing objective properties – e.g. technology management. On the contrary, this study has focused on soft matters such as citizens and their collaborative aspects in a subjective manner to broaden the targeted horizon of readiness assessment. In practice, beyond the informational and transactional functions, government officials may have information about local needs, but a guarantee is required as to whether any top-down solution of that need has any demand among the local citizens. If the content of the e-Government solution is being prepared without assessing the local citizens' requirements and their

capabilities, there will be no guarantee that local citizens will use the IS or solution. Realising the collaborative requirement in addressing the integration of core functions (informational, transactional and operational) in assessment, we propose a new function of collaboration termed as “congregational” in the proposed rectified model of [Koh et al. \(2008\)](#).

We argued that readiness of government officials or extension agents to implement e-Government does not mean only a readiness to use local knowledge in the service delivery process or informing local citizens about local development programs. Changing of the traditional bureaucratic mindset and attitude of these officials is vital in achieving e-governance in developing nations like Bangladesh. Government officials can use their local knowledge and prepare very sophisticated e-Government contents, but that does not guarantee their uses by the local citizens unless the citizens perceive that the e-governance features will fulfil their own needs. On the one hand, government and elected officials need to be ready to change their mindset and place value on the opinions of local citizens; on the other hand, local citizens need to be ready to change their attitude of passive recipients and come forward with their knowledge and share resources of government. This extends the prior assessment model by [Koh et al. \(2008\)](#), in that along with the governmental office’s readiness, readiness for establishing e-governance also depends on collaborative activities among all local stakeholders in public service delivery. [Mohamed \(2011\)](#) argued that citizen awareness is required in implementing e-Government practices; however, he has not mentioned the integration between citizens and officials in designing and implementing services. Similarly, [Khalil \(2011\)](#) emphasised the government’s willingness to understand citizens’ needs in catering e-Government contents, but has not recommended deliberation with local citizens and use of local knowledge for e-Government solutions. Our research finding, thus, further emphasises not only the need to understand but also the need to work together to cater e-Government contents.

We empirically tested our proposed changes in e-governance readiness assessment within local governance consequences. Case data (school case) were used to investigate whether the proposed element can add appropriate value to readiness assessment. It was found that assessing the status of collaborative action can be of significance to represent accurate readiness of all actors, e.g. government officials, elected leaders, business associations and local citizens for establishing a new government system. This finding could benefit various e-Government initiatives in developing countries, especially for addressing the critical collaborative needs of e-Government “implementation”. [Stewart et al. \(2000\)](#) defined “implementation” as preparing an organisation to receive an IS for its effective use. The study addressed the call to enhance assessment methodology for readiness of e-Government implementations.

This paper is based on a PhD research project by the first author, in which citizens’ participation for e-governance in the rural sector of Bangladesh has been assessed ([Waheduzzaman, 2010](#)). In this study, we revisited findings in particular for assessing the readiness aspect. One of the potential issues revealed is how we can scale up the value of effective collaboration in the current context of the Bangladesh Government. A systematic e-Government solution can map the appropriate collaboration that can ensure effective governance. It is, therefore, important to evaluate as a pre-conditions of e-Government application’s implementation. This study focused particularly on the

socio-cultural factors, such as readiness of local stakeholders and their collaboration in delivering government services, to assess the readiness of e-governance in a comprehensive way in a developing country context. The study has not focused on a socio-technical aspect in which all elements of e-governance such as electronic systems, citizen, data and Internet facilities are studied. Further research is required to address this aspect by implementing the feedback from relevant stakeholders using our designed prototype to add more construct into the readiness assessment.

#### Note

1. Adopted from Ingram's (1980) definition of congregational form of governance in local assembly, we represent the congregational function (in the context of e-Government studies) is for collaboration of citizens and government bodies for the purpose of effective governance (Source: Ingram, 1980).

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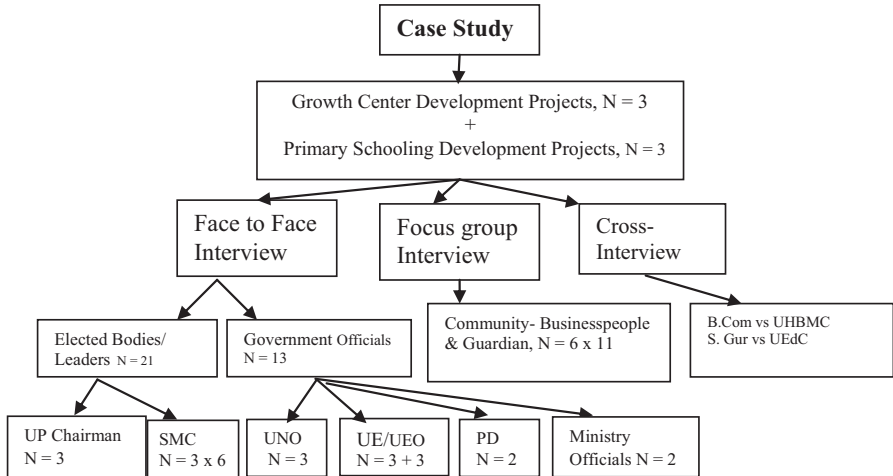
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**Figure A1.**  
Population, sample  
and methodology for  
data collection

**Notes:** UP = Union *Parishad* (sub-sub-district council); UNO = *Upazila Nirbahi Officer* (CEO of sub-district); UE = *Upazila Engineer*; UEO = *Upazila Education Officer*; B.Com = business community; S. Gur = student guardian; UEdC = *Upazila education committee*; UHBMC = *Upazila Hat-Bazaar management committee*; PD = project director

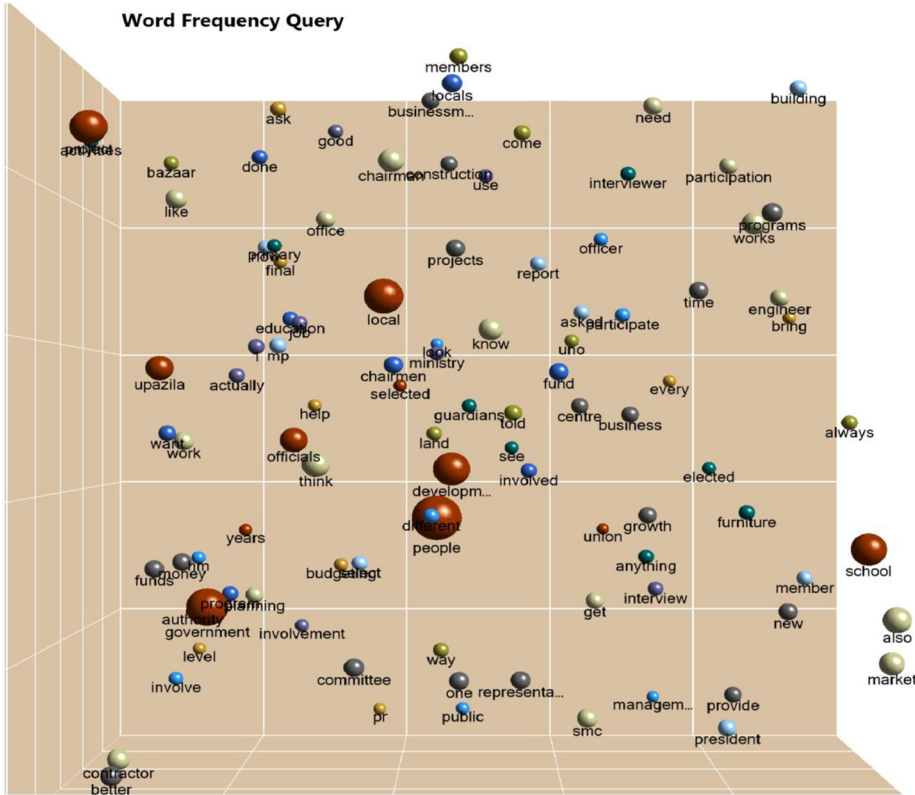


Figure A2. NVivo queries at word, code and theme levels

Code	Length	Count	Weighted (%)
Participation	13	233	24
Accountability	14	183	19
Transparency	12	155	16
Leadership	10	141	15
Service-delivery	15	98	10
Project	7	43	4
Management committee	19	29	3
Relationship	12	26	3
School committee	14	26	3
Business committee	17	25	3
Values	6	12	1

Table AI. Coding frequency query

**Table AII.**  
Theme frequency  
query

Theme	Length	Count	Weighted (%)
Engage	6	76	20
Feedback	8	65	17
Trust	5	57	15
Awareness	9	55	15
Perception	10	47	13
Community forum	14	33	9
Power	5	28	7
Monitoring participation	23	13	5

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