## eGOVERNMENT CAPACITY BUILDING THROUGH KNOWLEDGE TRANSFER AND BEST PRACTICE DEVELOPMENT IN BANGLADESH

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**Abstract:** This paper outlines an applied research project which was successfully conducted in Bangladesh. Prior research has shown that attitudes and a lack of knowledge have been the major stumbling blocks preventing ICT adoption in Bangladesh's public sector. Accordingly, this one year project under t he a uspices of t he A ustralian Government's P ublic S ector Linkages P rogram (PSLP) addressed two critical is sues; f illing the 'knowledge g ap' on eGovernment processes a nd e mpowering g overnment of ficials a nd decision makers to prepare them for successful i mplementation of e Governance. I n addition t o pr eparing a strategy based on the prior research, the project aimed to build the capacity of government officials through a comprehensive but concise training program. The training was supported by a handbook specially pr epared to suit the con text that is like ly to serve as a cons tant companion and guide for day-to- day IT management for government officials. **Keywords:** capacity building, eGovernment, ICT4D, public sector

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## 1. INTRODUCTION

The least developed countries (LDCs) are the victims of an increasing digital divide. Many struggle to find a workable modality to bridge or reduce this gap in the global information race. Initiatives at both the national and international level have created a lot of rhetoric but have f ailed t o de liver pr ograms t hat pr omote t he adoption of Information a nd Communication Technology ICT (Heeks, 2002). Often it is the bureaucratic tradition of the colonial system with its stubborn hierarchical structure that is slow to respond to the changes that modern ICT offers.

Prior studies indicate that correct use of ICT has the potential to improve efficiency and productivity in the public sector in L DCs, which c an a lso have flow-on effects t o other sectors (World-Bank, 2005). It is encouraging t o f ind t hat e Government has g ained an importance on the B angladesh g overnment's a genda (Sobhan et a l., 2004). H owever, the government lacks the required knowledge, expertise and resources necessary for the adoption of IC Ts (Imran, 2006). Greater strategic direction and institutional help supported by strong political will is necessary to take eGovernment forward. While the developed countries are engaging themselves in fine tuning g overnment s ervices at higher stages of eG overnment, LDCs like Bangladesh are struggling to overcome the initial stages of eGovernment adoption (Imran and Gregor, 2007).

The project described here aimed to first develop "know-how" among key decision makers and g overnment of ficials i n B angladesh f or t he e ffective us e of I CT i n m odern public organizations through a comprehensive, concise training program supported by a handbook as a constant companion and guide for daily IT management issues. The handbook is expected to equip officials with sufficient knowledge to prepare requirement documents for software developers, pre- and post- evaluation procedures, ICT governance, ICT auditing and s ome project management skills specifically for eGovernment projects.

This project stands out by focusing on the critical issue of filling the 'knowledge gap' on eGovernment processes and process reengineering, in a systematic way to achieve successful implementation of ICTs. It was found that government officials with a good understanding of the effective use of ICT and eGovernment can be important drivers in the implementation of eGovernment in a LDC.

This paper briefly narrates the project, its goals and objectives, major deliverables, challenges and some lessons learnt to date.

## 2. THE PSLP EGOV PROJECT

The project reported here was initiated by the N ational C entre f or I nformation Systems Research (NCISR) at t he A ustralian N ational U niversity (ANU) in 2008 t hrough a competitive AusAID Public Service Linkage Program (PSLP). PSLP is a special scheme of AusAID, which a imst o i mprove public s ector c apacity in s elected A sian countries for governance and m anagement f or na tionally de termined de velopment out comes (AusAID,

2008). Improving internal g overnment pr ocess (G2G), w hich is a n i mportant pa rt of eGovernment is the major focus of this project. The project was based on P hD research on ICT adoption in the public sector of an LDC largely motivated by the personal experience of the lead author w hile w orking a s an IT a dministrator i n the public s ector i n B angladesh. Earlier research (Imran, 2006) found a lack of knowledge and the attitudes towards ICT of senior public s ervants a s the major s tumbling bl ocks that are preventing ICT a doption i n Bangladesh's public s ector. These de ep-rooted underlying c auses have not be en addressed adequately or systematically by any past eGovernment initiatives i n Bangladesh, where the focus has been mostly on technological aspects. Based on a framework taking insights from Roger's (1995) Diffusion a nd Innovation theory, S cott's (2001) Institutional t heory a nd Attewell's (1992) Knowledge Building framework, earlier research recommended a slow and steady a pproach t o ove rcome t he i nstitutional i nertia pr evailing in the public sector environment in Bangladesh (Imran, 2006).

The c ounterpart public s ervice a gency of t his project was the M inistry of S cience and Information and Communication T echnology (MOSICT) of B angladesh. The Bangladesh Institute of Peace and Security S tudies (BIPSS) provided s upport a s a third party organization. The one year project was implemented in three phases.

## 2.2 Goals and Objectives of Project

The activity was aimed towards adoption of effective eGovernment in Bangladesh, focusing on capacity bui lding of g overnment of ficials to improve government pr ocesses ( e-Administration) or G2G (Government to Government) services.

The objectives of the activity were:

- To de velop "know-how" a mong ke y de cision m akers a nd g overnment officials in Bangladesh concerning the effective use of ICT in public sector organizations.
- To develop strategies for the effective uptake of ICT and eGovernment in Bangladesh.
- To support ongoing projects in eGovernment in Bangladesh.

## 2.3 Major Deliverables

The project had two major deliverables:

### 2.3.1 eGovernment for Bangladesh: A Strategic Pathway to success

This was a comprehensive report with a strategic direction (Imran et al., 2008), which gives an outline for long-term eGovernment adoption and implementation for Bangladesh based on the findings of ong oing r esearch and de tailed r eview and recommendations by the project team. This significant part of the activity will have long-term implications. D espite m any initiatives over the past few years in Bangladesh, satisfactory progress has not been achieved in this ar ea. As such, this strategic direction will be an important starting point tow ards attaining eG overnment capa city in the public s ector of Bangladesh which will s erve as a constant reference and guideline for future eGovernment initiatives in Bangladesh. The report included details of the PSLP activity, including the training plans.

# 2.3.2 ICT Management Handbook and Training Package; A Guide for Government Officers of Bangladesh

This concise handbook (Gregor et al., 2008) includes four modules: (a) Introduction to the eGovernment Framework (b) Making an ICT Business Case (c) Project Management and (d) Managing Outcomes. Each module has been de veloped by e xpert c onsultants i n t he respective ar eas based on r esearch findings and, through close c onsultation and e xtensive local involvement, tailored to suit local conditions. The training package includes Teaching Material with P owerPoint s lides, E xercises a nd/or Q uizzes with s uggested a nswers, a nd Video clips, all of which take two days to deliver. The Teaching Package is a self-contained package that can be re-used over multiple offerings of the teaching program and be able to be delivered by people other than the original developers.

## **3. PROJECT PHASES**

## 3.1 Phase 1 (Jan – Sep 2008)

Review of existing eGovernment strategies and training needs was carried out with extensive local involvement and previous empirical study. Input was sought from current collaborators such as the Australian Government Information Management O ffice (AGIMO) and other agencies. Two mini-workshops were arranged with stakeholders to prepare the schedule and task list; one in Bangladesh and one in Canberra. The aim of the workshops was to build a common understanding through the exchange of views on s trategies and training needs to initiate the project and also to share be st practices and de velop s trategies f or c ontinued effective ut ilization of I CT i n e Government i n B angladesh. D uring J ul – Sept 2008, the package for the "I CT M anagement f or G overnment O fficers" – the 2 da y program – was developed with extensive local involvement to suit local conditions.

### 3.1.1 Road Test

The entire Program Package was piloted and refined. A preliminary road test was carried out with the team and some invited participants (Bangladeshi-born students studying at ANU). A further revision was carried out based on the feedback and evaluation of the road test to suit the local condition.

### 3.2 Phase 2 (Oct 2008)

A seminar was delivered followed by the launch of the Strategy in Bangladesh, where the final report with a road map for the project was presented to the Minister for Science and Information and Communication Technology (MOSICT) of the Government of Bangladesh.

The t raining pa ckage w as delivered as a two-day w orkshop over multiple offerings. Participants (total 107) were senior and middle managers from the public sector selected by MOSICT. T he pa rticipants fell into t wo g roups: (a) pot ential c hampions, f rom among relevant department Heads and similar positions of influence and (b) people who are likely to become trainers in the follow-on stages. The 3 T raining Programs had about 35 participants on average, with a mix of "champions" and pot ential "trainers". Workshop a ttendees then returned to their ag ency t o act as a nuc leus for further change. Prior experience and innovation literature suggest that having a group rather than a single 'change' agent in an organization provides more credibility and leads to more effective uptake of ideas.

## 3.3 Phase 3 (Nov 2008 onwards)

Phase 3 is a follow-up rather than an immediate part of the activity. This however depends on the interest and willingness of all the parties involved. In Bangladesh the follow-up activities could include f urther knowledge de livery pr ograms and m entoring of key eGovernment development projects. Engaging in these follow-up activities fits well with the mission of NCISR, which is to engage in applied research that has practical and societal value. Follow-up studies are being planned to evaluate and monitor the training outcomes and the change of attitude a nd mindset of t he g overnment of ficials a fter t he a ctivity. T he r esult of these evaluations and b est pr actice g uides w ill also be published in t he pr int m edia a nd Government media in Bangladesh, so that the stakeholders can derive benefit.

The willingness of the counterpart organization to support further offerings of the program by local trainers will also be evidence of its effectiveness. An early positive sign is that MOSICT has t aken i nitiative t o r eprint a nother 500 c opies of t he handbook at its own cost t o be distributed amongst the public servants and departments within the government.

## 4. DISCUSSION AND LESSONS LEARNED

The reported activity is a n i nitial s tep t owards a dopting s ustainable a nd w orkable eGovernment in the context of B angladesh. It offers a holistic approach that addresses the major issues and barriers to ICT adoption in this country. These issues and barriers need to be addressed before infrastructure and technological solutions can be effectively implemented.

The 'Educate to Innovate' activity to raise awareness through targeted training is expected to build the capacity of the key officials who will be dealing with future eGovernment projects undertaken by t he g overnment. It is not expected that participants attained an in-depth knowledge of IT ma nagement with this int ensive two-day training m odule. Rather the program is designed to enable the important of ficials who are sparing two whole w orking days to utilize their a cquired skills in the best pos sible m anner. Such courses are of ten effective in bringing the participants in line with the contemporary and m odern changes in public sector management.

Using an initial execution of the training program for senior officials as an 'ice breaker' was found to be very effective. Many of them shared their experiences at the training workshop with their col leagues in their de partment, which created a very positive impact. Personal responses, both verbal and email, were very s atisfying and evidence of the training's effectiveness.

Dealing with bureaucracy and public s ector of ficials in a developing c ountry is a lways a challenging t ask because of t he hi erarchy and complexities that t he procedure i nvolves, especially in implementing an applied research project from overseas. This challenge was met through pr ior c onnections e stablished through the lead r esearcher's pr evious w orking experience i n the Bangladesh G overnment and a continued r elationship, pe rsistence a nd, above all, strong motivation about the novelty and impact of the outcome of the project. A willing and c ommitted champion within the c ounterpart or ganization was also found to be essential.

In the LDCs, a majority of the population are under the poverty line, deprived of education and knowledge, and are heavily dependent on g overnment or their leaders (UN-OHRLLS, 2007). Often they tend to be good followers rather than exercising their own rights. As such, a top-down approach can be effective to bring change. A single good government decision affects millions in LDCs. These millions would otherwise be difficult to r each through a bottom-up approach, which would also be a lengthy and time-consuming procedure. Thus, educating a single g overnment of ficial or decision m aker i s sometimes equivalent t o educating millions because hi s/her one g ood decision c ould bring change t o t he lives of millions (Imran et al., 2008).

A working experience and immersion in the context of the public sector environment in an LDC helped to address the challenges and also to capture the underlying issues that are often overlooked. R eputation, trust and working experience of the researcher in the context was instrumental in this project. Having the support of NCISR of ANU which has been designed to be a ble t o c arry out s uch a project and its experienced and capable r esearchers and members to work as a team provided the means to take this forward. A NU's world class research capability and reputation is widely recognized. Further, the topic and project being originated from PhD research; the rigor and relevancy required for such an important national level project was obtained through sound theoretical and academic foundation. Good access and pe rsonal l iaison with the s takeholders of I CT i n the c ountry, s ome national policy makers, and Government agencies were instrumental for the project to be a success.

# 5. CONCLUSION

The activity in Bangladesh has a strong potential to contribute to the overall development of the c ountry by a ddressing one of the key hindrances in the development of public sector organizations: a lack of efficiency and transparency. This activity focused on an important underlying i ssue of bridging the know ledge g ap, which is likely to resolve a lot of other associated issues with ICT adoption in the public sector such as, attitude and typical mindset, lack of w illingness t o c hange t he s tatus quo, procrastination i n de cision m aking, and motivation for such innovation. It is hoped to build the capacity of government officials who are ex pected to deal w ith future eGovernment projects in B angladesh. I nstitutional strengthening is a long process but the right direction and progress toward this is extremely important. Adoption of eGovernment will not only i mprove the internal efficiency of the Bangladesh public service, but will a lso f acilitate i nternational bus iness c onnectivity a nd attainment of the Millennium Development Goal (MDG) set by the United Nations.

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