Public Private Partnership (PPP) as a Model for Introducing E-governance in Developing Countries: A Case Study from Bangladesh

Hasan Muhammad Baniamin^{*}

Abstract

E-governance has the potential to radically change the face of government. But e-governance is a resource intensive activity in its initial phases. Successful planning and implementation of e-government requires an abundance of technical and financial resources. Lack of these resources is an overriding bottleneck in most developing countries. PPP can usher the developing countries in this regard by providing necessary skills and financial resources.

Introduction

E-governance has the potential to radically change the face of government. Because a mature, effective e-government has the capacity to create new methods and avenues for participation in government, acting as an endless wire, electronically threading together citizens, businesses, and all levels of government in a nation (Jaeger, 2003). But e-governance is a resource intensive activity in its initial phases. Successful planning and implementation of e-government requires an abundance of technical and financial resources. Lack of these resources is an overriding bottleneck in most developing countries. This article will try to explore an imitable model for successful adaptation of e-governance in developing countries.

E-governance

Information and communication technologies (ICT) are recognized to have tremendous administrative "potential". It can help to create a networked relationships (Snellen, 2002), transformation of service

^{*} Lecturer, Department of CSE, The People's University of Bangladesh and Research Associate, Public Policy and Governance Program, North South University, Dhaka, Bangladesh. (hm.baniamin@gmail.com)

delivery (West, 2004), to reduce cost and to increase efficiency (Amit and Zott, 2001), to increase interactions between stakeholders (Ein-Dor, Goodman, and Wolcott, 2000) to curve corruption (Pathak, Singh, Belwal, and Smith, 2007), to increase transparency (Torres, Pinaand Acerete, 2006), and to ensure accountability (Pina, Torres and Acerete, 2007). Electronic government or e-government, has emerged as a popular catch phrase in public administration to cover all of these functions.

Means and Schneider (2000) define e-government as the relationships between governments, their customers (businesses, other governments, and citizens), and their suppliers (again, businesses, other governments, and citizens) by the use of electronic means. Similarly, for Hernon (in Duffy, 2000) e-government is "simply using information technology to deliver government services directly to the customer 24/7. The customer can be a citizen, a business or even another government entity".

Brown and Brudney (2001) categories e-government efforts into three broad categories of e-governance: Government-to- Government (G2G), Government-to-Citizen (G2C) and Government-to-Business (G2B). G2G involves interaction among government officials, whether within a government office or within government offices; G2C involves interaction of individual citizen with the government and G2B involves interaction of business entities with the government.

E-governance in developing countries

The e-governance movement in developed countries is largely triggered by the availability of web based technology, through which it becomes possible to access government agencies remotely and inexpensively. But, for their internal operations, government organizations are already using ICT-based systems. So the stages of e-government described by UN-ASPA are mostly appropriate for the developed countries. UN-ASPA proposed five stages of e-governance development. The first stage is the 'emerging' stage, in which an official online government presence is established. Second, the number of government sites increase in number and become more dynamic in 'enhanced' stage. The third 'interactive' stage enables the users to download forms and interact with officials through the web. In the fourth 'transactional' stage, users have the ability to make online payments for transactions. The final 'seamless' stage makes the integration of electronic services across government agencies possible (in Yildiz, 2007). All these stages are based on web based applications. This is also reflects in UN-ASPA's definition of egovernance. UN-ASPA (2002) defined e-government as "utilizing the Internet and the World-Wide-Web for delivering government information and services to citizens" (in Yildiz, 2007). In the case of developing countries, ICT use in the public sector is very limited and therefore they have poor ICT infrastructure, if any. Consequently for developing countries e-government's first stage is the computerization of internal operations of internal operations and services. Thus, for many government departments, "e-governance" is a significant, expensive, infrastructural change, as they have to plan switching from totally paperbased systems and services to totally computer and web-based systems and services (Saxena, 2005). This transformation requires an abundance of technical and financial resources. Lack of these resources in developing countries act as the impediments of the introduction of egovernance. But to harness the benefit of e-governance, the developing countries have no option but to develop a viable model to remove these roadblocks. Adopting the model of PPP (Public Private Partnership) may usher the developing countries in this regard.

Logic for Partnership

For implementing public organization's project we can get three probable options (although each has many variations): direct public provision, contracting-out (i.e., design, build, operate, transfer) and public private partnership (PPP). In first instance government can implement its own project of its own without any external help if it has sufficient technical skill (TS) and financial recourses to implement the project.

In the second instance government outsource the project to the private organizations. A "Client-Contractors" relationship prevails between the two entities. Here government plays mostly oversight and regulatory roles.

In the third instance government take private entities as partners to implement project. In many developing countries managing both the required TS and required capital (RC) is a problem. If the government fails to provide sufficient TS and capital then there will be a deadlock to implement the project. This creates a 'capacity gap' which leads to 'inefficiency cycle' for public organization. Because lower capital and lower level of technical skill leads to lower investment, lower investment leads to lower efficiency in the organization which leads to lower performance and this lower performance manifests the lower capacity of the public organization. This lower capacity leads to further lower investment and create an 'inefficiency cycle' in public organization.

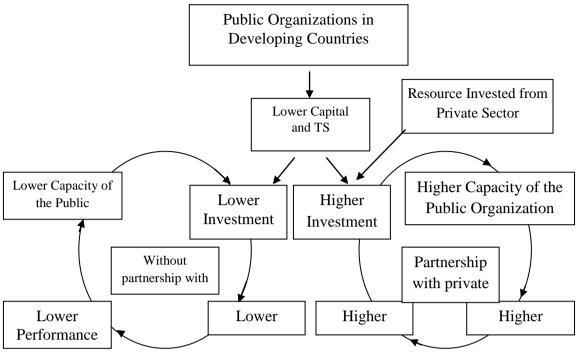


Figure: Inefficiency cycle in public organization

To overcome from this deadlock government can initiate the project through collaboration or partnership with private entities which we can level as Public Private Partnership (PPP). For the purpose of this article, the definition of PPPs will be: a cooperation between public and private actors in which actors develop mutual products and/or services and in which risk, costs and benefits are shared (Klijn and Teisman, 2003).

During the last decade many countries have experienced an increasing interest in PPP, often touted as a new generation of management reforms overcoming deficits of earlier waves of privatisation and marketisation (Pollitt, 2003). PPP first emerged in the United States (US) in the late 1970s and early 1980s in response to what was seen (mainly by neo-liberal politics) as the poor performance of the public sector. The concept emerged with a view that the State had reached its financial limits as far as the provision of public services were concerned (Carrol and Steanne 2000).

The basis of the third 'P' of the PPP, entails a joint alliance between the public and private sectors beyond the traditional contractual relationship. Such association brings the best of each partner's competence to optimize the achievement of the common objective. Government can fill up these deficiencies through this type of partnership. Here the values prevail between the two are shared goals and mutual trust.

Public Private Partnership and E-governance

From the preceding discussion we can find two important variablestechnical skill (TS) and required capital (RC) and three options- direct public provision, contracting-out and public private partnership (PPP) for implementing a government own project. Considering these two variables and three options we can develop a matrix which can state the appropriateness of the options in different context.

Required Technical Skill (RTS)	Quadrant 3: RTS- High RC- Low	Quadrant 4: RTS- High RC- High
	Quadrant 1: RTS- Low RC- Low	Quadrant 2: RTS- Low RC- High

Required Capital (RC)

Figure: Determinants of appropriateness of different project options

Quadrant 1: In 'Quadrant 1' both the required technical skill (RTS) and required capital (RC) are low, so generally all the three options are open here for government. Because government may have RTS and RC to implement the project of its own or have RC to outsource to other agencies or go for partnership with private ventures.

Quadrant 2: In 'Quadrant 2' the RTS is low but RC is high. If the government has sufficient RC then government can implement the project of its own or through other agencies. But if the government doesn't have sufficient capital than to implement this type of projects, then only option is open for government i.e. to go for partnership. Through partnership government can accumulate required capital.

Quadrant 3: Here RTS is high but RC is low. Generally this situation doesn't prevail; specially in developing or in least developed countries. Because higher techno centric projects need higher capital investment. In developed countries where there are availability of skilled manpower and infrastructure, there this type of scenario can be seen. With low capital investment they can implement a techno centric project. For example- if the computer and its network facilities are available for an organization and almost every employees have required level of knowledge about

computer and its required operations then that organization can launch a system based on computer at comparatively lower investment. But in developing countries, generally such scenario is very rare.

Quadrant 4: Here both the RTS and the RC are high. To implement this type of projects, government should have high TS and should invest higher volume of capital. If the government doesn't have sufficient TS but has sufficient capital than the government can go for partnership or outsource the project to other agencies for implementation. But if the government doesn't have sufficient TS and capital than there is no options for the government but to go for partnership for implementation of this type of project. Because through partnership government can fulfill its deficiencies.

From the preceding discussion, we can see that public organizations can implement any project in the mode of PPP in the aforementioned four scenarios. But for the techno centric and capital intensive projects, PPP is the best options for the developing countries as there are scarcity of TS and capital. Through partnership public organizations can easily overcome these deficiencies.

As the introduction of e-governance in developing countries requires techno-centric and capital intensive projects and many developing countries don't have sufficient TS and capital then PPP can be the best options for them. We will analyze a case study from Bangladesh to see how far this model works in practice in developing countries.

A Case Study: Chittagong Custom House Automation (CCHA) in Bangladesh

E-governance is much more than just the act of automation (computerization) itself. While an e-government is an automated government, the reverse does not inevitable hold true (Saxena, 2005). But in developing countries the first steps towards e-governance is mostly based on automation of internal work process. As the automation is subset of e-governance, we select the Chittagong Custom House Automation (CCHA) in Bangladesh as our case study.

Context of Automation

Chittagong sea port is considered as a gateway for Bangladesh. It is not only the gateway for Bangladesh but also considered as the gateway for the whole region. This port is the lifeline of export-import activities in this region. Chittagong Custom House (CCH) plays pivotal role in facilitating export business and earning revenue of the country. It is one of the main revenue earning source of the government of Bangladesh. Every year government generates around BDT 150,000+ million as revenue from operations of CCH. This means CCH earn around BDT 500-700 million per day. The huge problems prevailing in the CCH including those of long and cumbersome 42 steps in cargo assessment, irregularities in auction activities, revenue evading tendency by unscrupulous businessmen, irregularities of **PSI**(Pre-Shipment Inspection) companies and lack of proper coordination of activities among different stakeholders of Chittagong port and Custom house. Though this organization's yearly earning is around BDT 150,000+ million, unfortunately spending a few million taka for the automation was impossible for it. This perpetuated the inefficiency cycle of the organization and crated a deadlock. This same situation is prevailing in all other government organizations too.

Breaking the Deadlock

To break the deadlock a new innovative collaborative approach was taken which can be labeled as Public Private Partnership (PPP). The automation project is now implementing through 'BOOT' (Build-Own- Operate-Transfer) process. Chittagong Chamber of Commerce and Industry, one of the leading chamber of the country proposed the government to finance (of about BDT 330 million) the automation system without any financial involvement of the later. Data Soft, a local IT firm company, agreed to materialize the whole project by five years and even to repay the money, invested by the chamber, the second and the third years.

Achievements of the Project

Journey of automation of CCH has been started since March 16, 2008. Though the automation project is yet to complete but it already have achieved some remarkable successes. Now because of automation, the 42 steps lengthy process has been curtail to only 6 steps, bill of entry cost reduced BDT 180 to BDT 50. Implementation of the whole project is expected to produce the following benefits:

- Doubling the revenue in two years.
- Reducing cost of doing business by at least 70%.
- Saving customs processing time be 80%.
- Monitoring international and domestic price.
- Transparency and level playing field for business.
- Better risk management. (Website: Data Soft)

After the completion of the project, we will be able to analysis the full impact of the project. At the interim level we can see some aforementioned benefits. At this level what is most important that CCH becomes automated, started to have positive impact on the whole process and the key factor behind this success is PPP.

Key features and best practices

- A complete involvement without government finance.
- Active participation of 18 stakeholders, including Chittagong port, Navy, the shipping agents, freight forwarders, C&F agents, berth operators, BGMEA (The Bangladesh Garment Manufacturers and Exporters Association), BKMEA(Bangladesh Knitwear Manufactures & Exporters Association) and others.
- Engagement of dynamic civil servants.
- Involvement of army backed taskforce named Bravo. Taskforce was introduced to involve the irregularities in CCH and to prepare reform plans for CCH. This taskforce also played a facilator's role for automation by pursuing various stakeholders, arranging seminar etc.
- Centralized planning and decentralized execution.
- Involved restructuring of people, process and physical infrastructure.
- Support from highest level of government. Manifestation of such support can be seen when head of government launched the project.
- Recovery of investment during the implementation of the project.

Conclusion

PPP can be considered as a viable model for implementing the projects to adopt e-governance, developed with an aim to impart economic sustainability and provide necessary skills. This model is especially applicable for developing countries, where there are resource crunch. The automation of CCH is a glowing example in this regard and can be replicated to other similar type of projects. But such replication may require certain customization on the basis of the nature and context of the project.

References

- Amit, R. and Zott, C. (2001) Value Creation in eBusiness, *Strategic Management Journal*, 22, 493-520.
- Bekkers, V. J. J. M., & Zouridis, S. (1999). Electronic service delivery in public administration: Some trends and issues. *International Review of Administrative Sciences*, 65(2), pp. 183–196.
- Bovaird, T. (2004). Public–Private Partnerships: from Contested Concepts to Prevalent Practice. *International Review of Administrative Sciences*, 70, pp. 199.
- Carrol, P. and Steanne, P. (2000). Public-private partnerships: sectoral perspectives. In: Osborne, S. (Ed.), Public-Private Partnerships. Theory and Practice in International Perspective, London: Routledge.
- Ein-Dor, P.; Goodman, S. and Wolcott, P. (2000). "Via Maris to Electronic Highway: The Internet in Canaan", *Communications of the ACM* 43(7), pp.19-24.
- Hernon, P. (1998). Government on the Web: A comparison between the United States and New Zealand. *Government Information Quarterly*, 15(4), 419–443.
- Jaeger, Paul T. (2003). The endless wire: E-government as global phenomenon. *Government Information Quarterly*, 20, pp.323-331.
- Klijn, E.H. and Teisman, G.R. (2003) 'Institutional and Strategic Barriers to Public–Private Partnership: An Analysis of Dutch Cases'. *Public Money and Management*, 23(3), pp. 137–46.
- Means, G., and Schneider, D. (2000). Meta-capitalism: The e-business revolution and the design of 21st century companies and markets. New York: John Wiley & Sons Inc.
- Pathak, R. D.; Singh, G.; Belwal, R. and Smith, R. F. I. (2007) E-governance and Corruption-developments and Issues in Ethiopia, *Public Organization Review*, 7, pp. 195-208.
- Pina, V.; Torres, L. and Acerete, B. (2007). Are ICTs promoting government accountability? A comparative analysis of e-governance developments in 19 OECD countries. *Critical Perspectives on Accounting*, 18, pp. 583–602.
- Pollitt, C. (2003). *The Essential Public Manager*. Maidenhead: Open University Press.
- Saxena, K.B.C. (2005). Towards excellence in e-governance. *International Journal of Public Sector Management*, 18(6), pp. 498-513.
- Snellen, I. (2002). Electronic governance: implications for citizens, politicians and public servants. *International Review of Administrative Sciences*, 68, pp.183–198.
- Torres, L.; Pina, V. and Acerete, B. (2006) E-Governance Developments in European Union Cities: Reshaping Government's Relationship with Citizens. Governance: An International Journal of Policy, Administration, and Institutions, 19(2), pp. 277–302.

A Case Study form Bangladesh

- United Nations, & American Society for Public Administration (ASPA). (2002). Benchmarking e-government: A global perspective. New York, NY: U.N. Publications.
- West, D.M. (2004). E-government and the transformation of service delivery and citizen attitudes. *Public Administration Review*, 64(1), pp.- 15-27.
- Yildiz, M. (2007). E-government research: Reviewing the literature, limitations and ways forward. *Government Information Quarterly*, 24, pp.646-665.

Website:

Data Soft, Available online at:

http://www.datasoft-

bd.com/index.php?option=com_content&view=article&id=162&Itemid=45

(accessed 06 December 2009)