Challenges in Implementing the Electronic Government Procurement (e-GP) in Public Works Department (PWD)

Dissertation submitted in partial fulfillment of the requirements for the degree of Masters in Procurement and Supply Management

Submitted by

Tasnuva Mahmud
MPSM Batch: 12
MPSM ID: 16382001
MPSM Program
BIGD, BRAC University

Prepared For,

M. Shamim Kaiser
Associate Professor
Institute of Information Technology,
Jahangirnagar University

BRAC Institute of Governance and Development (BIGD)
BRAC University

Letter of Submittal

The Director,
MPSM Program
BRAC Institute of Governance and Development (BIGD)
BRAC University

Subject: Letter of Submittal

Dear Sir,

With due respect, I, the undersigned student of MPSM Program have reported on "The Challenges in Implementing the Electronic Government Procurement (e-GP) in PWD" under the course of MPSM thesis program under the supervision of M. Shamim Kaiser, Associate Professor, Institute of Information Technology, Jahangirnagar University.

Though I am in learning curve, the report has enabled me to gain insight into the core fact of the challenges in implementing electronic public procurement system. So it becomes an extremely challenging and interesting experience. Without the continuous inspiration and support of the department the report would have been an incomplete one.

Lastly, I would be very thankful if you please give your judicious advice on the effort.

Yours' Sincerely
Tasnuva Mahmud
MPSM ID: 16382001
MPSM Program
BIGD
BRAC University.

Acknowledgment

This thesis becomes a reality with the kind support and help of many individuals. I would like to extend my sincere thanks to all of them.

Foremost, I want to offer this endeavor to the Almighty for the wisdom he bestowed upon me, the strength, peace of mind and good health in order to finish this research.

I would like to thank my thesis advisor, Associate Professor M. Shamim Kaiser of the Institute of Information Technology, Jahangirnagar University. The door to Prof. Kaiser's office was always open whenever I ran into a trouble spot or had a question about my research or writing. He consistently allowed this paper to be my own work, but steered me in the right the direction whenever he thought I needed it.

I would also like to thank the employees of Public Works Department (PWD) and Central Procurement Technical Unit (CPTU) who provided me the necessary information for this research project: Ms. Sharmi Chakma (Assistant Engineer, PWD), Ms. Humaira Binte Reza (Executive Engineer, PWD, MIS cell), Mr. Sharif Ahmed (Programmer, CPTU). Without their passionate participation and input, the data collection could not have been successfully conducted.

I would also like to acknowledge Mr. Shamsil Arefin, graduate student of Institute of Business Administration (IBA) at University of Dhaka as the second reader of this thesis, and I am gratefully indebted to him for his very valuable comments on this thesis.

Finally, I must express my very profound gratitude to my family, my friends, my classmates and teachers for providing me with unfailing support and continuous encouragement throughout my years of study and through the process of researching and writing this thesis. This accomplishment would not have been possible without them. Thank you.

Author

Tasnuva Mahmud

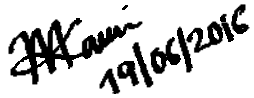
Students' Declaration

I, Tasnuva Mahmud, MPSM ID: 16382001, Batch: 12 of the MPSM program, BIGD, BRAC University, hereby declare that the work entitled "The Challenges in implementing the Electronic Government Procurement (e-GP) in Public Works Department (PWD)" is my original work. I have not copied from any other students' work or from any other sources except where due reference or acknowledgement is made explicitly in the text, nor has any part been written for me by another person. The thesis has not been accepted for any degree and is not concurrently submitted for award of other degree.

18th August, 2016 Tasnuva Mahmud

Supervisor's Certification

I, M. Shamim Kaiser, Associate Professor of the Institute of Information Technology, Jahangirnagar University, hereby certifies that the work entitled "The Challenges in implementing the Electronic Government Procurement (e-GP) in Public Works Department (PWD)" was prepared by the above named student, and was submitted to the "FACULTY" as a partial fulfillment for the conferment of Masters in Procurement and Supply Chain Management (MPSM), and the aforementioned work, to the best of my knowledge, is the said student's work.



Received for examination by:
Date:

M. Shamim Kaiser
Associate Professor
Institute of Information Technology
Jahangirnagar University.

Executive Summary

The master thesis work involved the challenges in implementation of Electronic Government Procurement (e-GP) system in the Public Works Department (PWD). The e-GP system provides an on-line platform to carry out the procurement activities by the Public Agencies - Procuring Agencies (PAs) and Procuring Entities (PEs). It's a new and technology based online procurement process. The system facilitates easy and convenient way of tendering goods, works and services for the Govt. As procurement is always a sophisticated and complex mechanism, Electronic Govt. procurement can minimize the complexity of its users in different ways as it can be accessed from anywhere and anytime.

The major challenge in implementing e-procurement is, at its core, an exercise in change management. As with any major organizational changes, upper management buy-in is the key. The values of e-procurement must be clearly communicated to all stakeholders; from the top on down, or else there will be the risk of trying to make changes without the proper authority, which, in turn, will lead to high levels of non-compliance.

The government of Bangladesh has under the wider "Digital Bangladesh" project has displayed enormous commitment to the E-Procurement initiatives, while PPA and the entities who are involved in the pilot phase of the e-GP implementation are ensuring that the pilot phase succeeds to inform a nationwide rollout. The engagement of a consultant to assist the CPTU (Central Procurement Technical Unit) with the implementation and the recent study tour to India and England has confirmed the commitment to learn and adopt best practices as far as the e-GP is concerned. Benefits of an e-GP system cannot be over- emphasized. Complimenting government's efforts to ensure good governance, the CPTU is fully committed to see to the implementation of this project and continues to collaborate with all stakeholders to ensure its success.

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Chapter One

Introduction

Background

For Master of Procurement and Supply Chain Management (MPSM) student only theoretical knowledge is not enough for handling the real life business situation. It is a great opportunity for the student to know about the real business operations through the research program. Research work is the perfect blend of the theoretical and the practical implications of the theories in solving life experience. It is mandatory for any MPSM student of BRAC University. For that reason this report will be prepared on Challenges of implementing Electronic Govt. procurement in Public Works Department (PWD). Different terms that are related to the electronic govt. procurement will be described in the report.

Rationale of the Study

Master of Procurement and Supply Chain Management (MPSM) is a professional graduate course. The course is designed with an excellent combination of practical and theoretical aspects. After completion taught courses of MPSM, a certain time is kept for thesis work. As a student of MPSM, research work is an academic requirement. For research work every student is required to work in a selected area to enhance ones practical knowledge and experiences. From that perspective this report will be prepared on electronic government procurement.

The e-GP system provides an on-line platform to carry out the procurement activities by the Public Agencies - Procuring Agencies (PAs) and Procuring Entities (PEs). It is a new and technology based online procurement process. The system facilitates easy and convenient way of tendering goods, works and services for the Govt. As procurement is always a sophisticated and complex mechanism, Electronic Govt. procurement can minimize the complexity of its users in different ways as it can be accessed from anywhere and anytime.

Objectives of the Study

The overall objectives of the study can be classified into two schemes- the broad objectives and the specific objectives.

Broad objective:

The broad objective of preparing this study is to analyze the Electronic Govt. procurement (e-GP).

Specific Objective:

More specifically, this study entails the following aspects

- ✓ To give an overview of Electronic Govt. procurement in PWD.
- ✓ To understand and analyze the electronic Govt. procurement process of PWD.
- ✓ To identify the strategies and policies for Electronic Govt. procurement management process
- ✓ To find out bottleneck of their process with effective solutions to overcome the limitation.

Methodology of the study

The methodology of the study included the followings-

1.4.1 Framework of the study

The whole report has been arranged in six specific parts. Part one named as Introduction, which includes the origin, objectives, significance and methodology of the report. Part two named as Overview on e-GP, which includes definition, role, objectives, modules of e-GP, system access of e-GP. Part three named as Benefits of e-GP over traditional procurement process, which includes benefits of e-GP over the manual procurement. Part four includes the main report on challenges in implementing electronic govt. procurement process of PWD. Part five includes analysis & findings and Part six includes recommendation and conclusion.

Target population

The target populations for the study are –

- ✓ Internal employees.
- ✓ Vendors of the organization.
- ✓ Key executives.

1.4.3 Study Area

The study has been conducted within the organization to represent the electronic procurement process and the pitfalls of the process in PWD.

1.4.4 Data Sources

For the information of the report both primary and secondary sources of data has been collected. But mostly the primary data has been used. Primary sources of data consisted of various data collected by informal interview with the employees. A secondary source including several studies on PWD of the website publications was performed for this purpose.

Scope of the Study

This research work focuses on the challenges implementing the electronic government procurement, e-GP system in the public procuring system. The study was based on the critical analysis of the role; extend, challenges and future prospects of e-GP in Public Works Department (PWD), as a major share of the annual development budget of the public fund of Bangladesh is allotted for this department. This study includes analysis in the following areas-

- ✓ Benefits of e-GP over traditional procurement process
- ✓ Extend of e-GP in PWD
- ✓ Future of e-GP in PWD
- ✓ The role of e-procurement in strategic sourcing
- ✓ The challenges faced during the implementation of e-GP and their possible solutions.

The study also examines the overall challenges in various departments in implementing the e-GP system in Bangladesh.

Limitation of the study

While doing this project I may have to face some limitations. These are as follows-

- ✓ This study has kept limited on analysis. There will be no formal test on any hypothesis base as it will be a procurement management theme.
- ✓ Time is the key constraints of this report.
- ✓ All the Information may not be easily accessible or not permitted to disclose according to the Govt. policy, rules and regulations on the disclosure of confidential information.
- ✓ It may be difficult to talk with different vendors.

Chapter Two
An overview on the Electronic Government Procurement (e-GP)

Definition of Electronic Government Procurement (e-GP)

Electronic procurement, usually alluded will similarly as e-procurement, characterizes the mechanization about acquisition Furthermore supply chain forms utilizing web based provisions Furthermore engineering organization. This stretches the thought from claiming endeavor asset arranging (ERP) systems, permitting that mechanization about interior benefits of the business courses accordingly giving work to an stage that backs mechanization In a worldwide level. It permits acquisition experts crosswise over the reality will impart data essentially Furthermore efficiently, streamlining those worldwide acquisition methodology; lessening the long haul What's more cost effective without bargaining on guidelines What's more nature. The point when the e-procurement device is utilized within general society part it may be then known as the electronic legislature acquisition (e-GP).

Figure 2.1: e-Procurement

Public Procurement can be defined as the acquisition, whether under formal contract or not, of works, supplies and services by public bodies. It ranges from the purchase of routine supplies or services to formal tendering and placing contracts for large infrastructural projects. So, the e-GP means the electronic purchase and sale of goods and services, usually through an Internet-based platform using the public fund. It is a tool designed to improve the purchasing process transparency and efficiency and help companies capture savings.

With a Gross Domestic Product (GDP) growth average of 5-6% over the last five years, Bangladesh has become one of the fastest growing economies in the region (The official website of CPTU). Fueled by an increase in public spending, fiscal reform and renewed investor confidence, the country is now considered a regional showcase for socioeconomic progress. It has adopted a philosophy of inclusive growth under the target of establishing “Digital Bangladesh”, which equates good economics with good governance. This underscores

governance as an ingredient in achieving growth. However, Bangladesh has now faced with the challenge of sustaining its impressive growth and making it more inclusive. This places a demand on government to provide an environment that ensures openness, efficiency in the delivery of services, and spaces for greater competitiveness. Such a demand, together with increased expectations, requires the government to optimize the role of Information and Communications Technology (ICT) in governance. It must move on from the non-integrated path of ICT development and agency-specific applications, toward a path that leads to an e-Government model that creates more valuable and meaningful services through interoperability and maximization of resources.

The Role of Electronic Government Procurement (e-GP)

The E-Government Procurement (e-GP) is a blueprint for the integration of ICTs for the whole of government. It builds on past plans while incorporating current aspirations to create a vision for the future. The plan recognizes that the issue of interoperability and harmonization is not solely a technical problem, but also includes many organizational concerns that need to be overcome. As such, the plan also describes the systems of governance (e.g. institutions, agencies, processes, resources and policies) that need to be strengthened to make its implementation possible and sustainable.

The e-GP acknowledges the important role that ICT plays in facilitating open and transparent government procurement and the delivery of efficient public services to the nation. In general, the e-GP provides e-Government builders and partners with the following:

i. Strategy for implementing e-Government: That e-GP adopts a whole-of-government methodology that helps those Bangladesh improvements want (2011-2016). Concerning illustration those e-GP's execution strategy, those Medium-Term ICT harmonization activity (MITHI) spots An premium on administration interoperability, coordinated effort Furthermore imparted assets. These centering highlights those need to create essential national electronic registries that will a chance to be used to backing interoperability deliberations. Same time setting a premium ahead interoperability, MITHI doesn't avoid mission-critical, agency-specific requisitions on further enhances the conveyance from claiming administrations (DoICT, 2010).
ii. Priority Projects, Milestones, and Resource Estimates: The e-GP presents building blocks for e-Government that include an initial list of priority projects. One of the most important of these is the Integrated e-Governance System of Bangladesh, which occupies a special place in the e-GP because it enables or facilitates many other projects. It is aimed at maximizing the use of ICT resources through shared ICT infrastructure and services for government agencies. The e-GP also provides an incipient "Action Plan" in the form of indicative milestones and estimates for resources needed for implementation (DoICT, 2010).

iii. Mechanisms: The mechanisms of e-GP are consistent with the "Digital Bangladesh" philosophy; the e-GP highlights the importance of collaboration, interoperability, shared services, and openness. It includes a list of proposed policies and mechanisms for creating and ensuring an environment that institutionalizes open government. Government interoperability frameworks (GIFs) and similar mechanisms toward this end will be crucial to the e-Governance agenda (DoICT, 2010).

Objectives of Electronic Government Procurement (e-GP)

The e-GP creates a digitally empowered and integrated government procurement system that provides responsive and transparent online procurement system for a globally competitive nation.

To achieve this objective, the Electronic Government Procurement (e-GP) aims to provide e-Government procuring agencies with a roadmap for the following:

- Roadmap for the citizens: The e-GP plans should exceed expectations in the conveyance of the government funded administration. It joins e-Governance projects with the yearly advancement objectives to guarantee the accomplishment of these objectives. E-GP identifies usage regions that could guarantee greatest reductions to nationals.

- Roadmap for government: The e-GP develops blueprint for the integration of ICTs for the whole of government. It creates a vision for the future by converging the past plans and present aspiration. The plan places a premium on value-adding, shared services, interoperability and the maximization of public resources. It also provides a platform for open government, mindful of anchoring its initiatives on principles of good governance.

- Roadmap for civil society organizations (CSOs): The e-GP highlights the importance of collaboration, interoperability, shared services, and openness among various public and private sectors. For that e-GP provides ample spaces for private sector, and other partners to ensure effective participation. And thus e-GP fosters synergy in governance. The plan highlights the importance of accountability and recognizes the role of CSOs as partners in governance.

- Roadmap for policy makers: To foster an integrated, interoperable and harmonized system of e-Governance, e-GP identifies policy and advocacy areas that need to be addressed in creating an environment necessary for fostering. Moreover, provided for the velocity by which ICTs Furthermore their utilization evolve, those e-GP also underscores the necessity for institutionalizing committed assets to investigate not best in the production from claiming

applications, as well as over concentrating on those suggestions these might have on governance arrangements by and large.

In summary, the conclusion objective of the e-GP may be with accomplishing transformative e-Governance. Transformative e-Governance may be crucial to gathering the nation's advancement objectives, Eventually Tom's perusing empowering the accomplishment about great legislation goals—including operational efficiency, transparency and responsibility openly procurement, improved citizen's engagement, Also viable conveyance of government funded administrations.

Introduction of e-GP in Bangladesh

The time has been speeding up. Advanced technology is the core requirement of modern world. In this age of technology no country can lag behind as it is now globally recognized that the right use of technology can reduce time and costs, thus removing the tangles in the delivery of services, particularly by the government. Bangladesh cannot stay behind and, the government has laid thrust on easy and quick delivery of public services.

The government of Bangladesh has a vision for building a Digital Bangladesh by 2021. For achieving the target some strategies has been set, e-GP is one of them. The e-GP System is a web based system which encompasses the total procurement lifecycle and records the all procurement activities. The purpose of this system is to maintain complete and up-to-date Public Procurement System activities of all public agencies as well as provide tender opportunities to all potential tenderers from Bangladesh and abroad. National e-Government Procurement (e-GP) portal (i.e. http://eprocure.gov.bd) of the Government of the People's Republic of Bangladesh is developed, owned, being operated and maintained by the Central Procurement Technical Unit (CPTU), IME Division of Ministry of Planning. The e-GP system provides an on-line platform to carry out the all procurement activities by the Public Agencies - Procuring Agencies (PAs) and Procuring Entities (PEs).

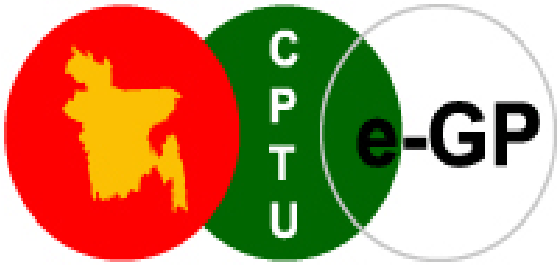

Figure 2.2: Introduction of the e-GP in the Public procurement system of Bangladesh

The Central Procurement Technical Unit (CPTU) of the Implementation Monitoring and Evaluation Division (IMED), under the Ministry of Planning has introduced e-tendering on a limited scale by the end of June, 2010. Under the Public Procurement Reform Project-II (PPRP-II) supported by the World Bank, e-tendering was introduced first in the target agencies — Local Government and Engineering Department (LGED), Roads and Highways Department (RHD), Bangladesh Water Development Board (BWDB), Public Works Department (PWD) and Rural Electrification Board (REB) (www.bangladesh.gov.bd).

CPTU officials said South Korea introduced the system nine years ago but was yet to run it in a centralized manner while several Indian states were partially running e-GP. The e-GP portal was launched in the June, 2013, developed by CPTU under the Ministry of Planning and started the e-tendering process. CPTU already signed a memorandum of understanding with seven banks-Agrani, Janata, Sonali, Pubali, United Commercial Bank, National Bank and Bangladesh Krishi Bank-to facilitate payments for the tenders. More private banks contacted CPTU to join the process (Website of CPTU).

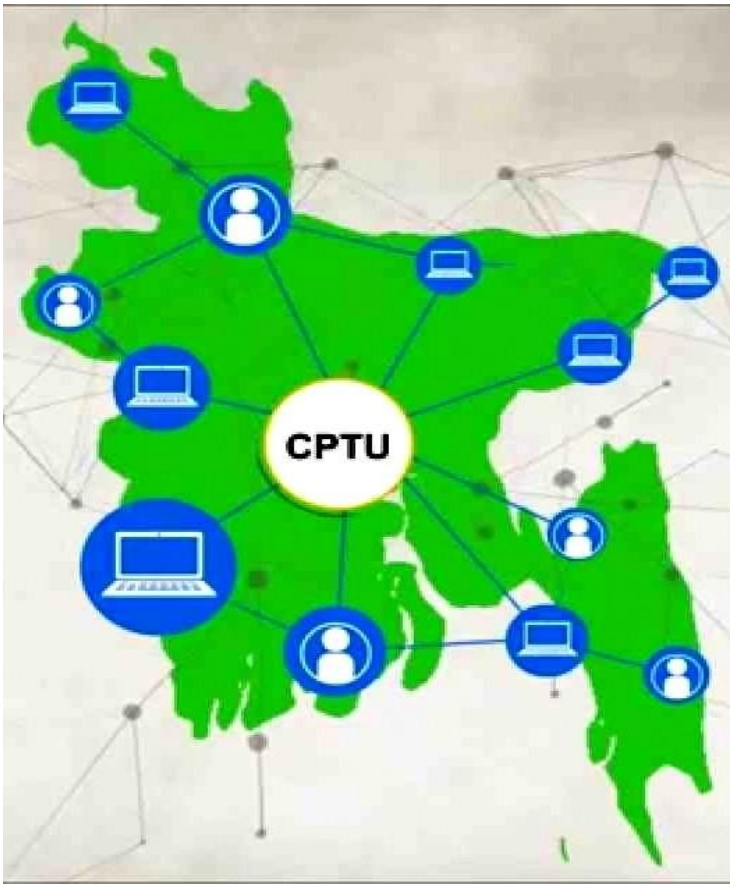

Figure 2.3: e-GP connecting the whole country

As the planning in the second phase, e-Contract Management System (e-CMS) is supposed to introduce covering complete Contract Management processes such as work plan submission, defining milestone, tracking and monitoring progress, generating reports, performing quality checks, generation of running bills, vendor rating and generation of completion certificate. The e-GP system is a single web portal from where and through which PAs and PEs will be able to perform their procurement related activities using a dedicated secured web based dashboard. It is hosted in the e-GP Data Center at CPTU. The web portal is accessible by the PAs and PEs through internet for their use (Ahmad, F. 2010).

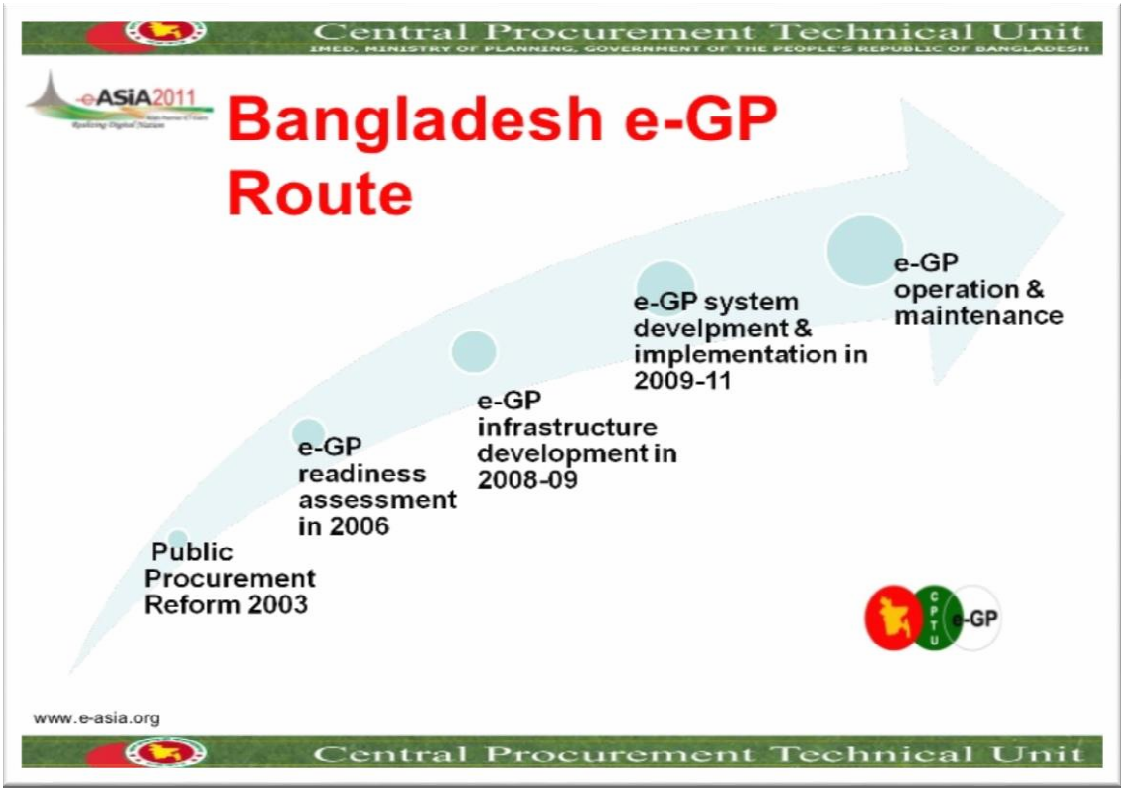

Figure 2.4: Route of e-GP in Bangladesh

This complete e-GP solution introduced under the Public Procurement Reform (PPR) Program is being supported by the World Bank and gradually used by all government organizations. This online platform also helps them ensuring equal access to the Bidders/Tenderers and also ensuring efficiency, transparency and accountability in the public procurement process in Bangladesh (CPTU Annual report, 2012).

Implementation of e-GP in Bangladesh

The vision of the e-GP is to enhance the efficiency and transparency in public procurement through the implementation of a comprehensive e-GP solution to be used by all government organizations in the country. Initially, on pilot basis, it was applied to a few Procuring Entities (PEs) of four target agencies namely Bangladesh Water Development Board (BWDB), Rural Electrification Board (REB), Roads and Highways Department (RHD), Local Government Engineering Department (LGED) and Public Works Department (PWD), in Bangladesh. The System, later on, will be rolled-out across all the procuring entities in a phased manner.
The e-GP System has been implemented in two phases:

- e-Tendering System: Covering complete e-Tendering processes such as centralized user registration, preparation of Annual Procurement Plan (APP), preparation of Bid\Tender document, preparation of Bids/Tenders, invitation of Tenders, sale of Tender Documents (eTD), conducting online pre-bid meeting, collection of bid\Tender security, on-line Bid\Tender submission, Bid opening & evaluation, negotiations (where applicable), and contract awards.
- e-Contract Management System (e-CMS): Covering complete e-Contract Management processes, such as preparation of work plan and its submission, defining milestone, tracking and monitoring progress, generating reports, performing quality checks, generating running bills, vendor rating and generating completion certificate.

e-Tendering and eCMS (eGP) is launched successfully on pilot basis and eventually being rolled out to all PEs of four Sectoral Agencies, namely Bangladesh Water Development Board (BWDB), Local Government Engineering Department (LGED), Rural Electricity Board (REB) and Roads and Highways Department (RHD) and Public Works Department (PWD). It is now expanding to all government procuring entity dealing with public procurement.

All the stakeholders, including Bidders/Tenderers / Applicants / Consultants (National and International), PEs, procurement related Committees, payment service providers, Development Partners (DPs), media, Operation, Maintenance and Management Entity (OMME), e-GP system administrators, auditors and general public are getting access to e-GP system and information as per the Terms and Conditions of Use and Disclaimer and Privacy Policy.

The e-GP system shall be used by all concerned, for procurement of goods, works and services using public fund, following the 'Government Procurement (e-GP) Guidelines' prepared under the provision of Section 67 of the PPA -2006 and Rule 128 of PPR-2008 and issued.

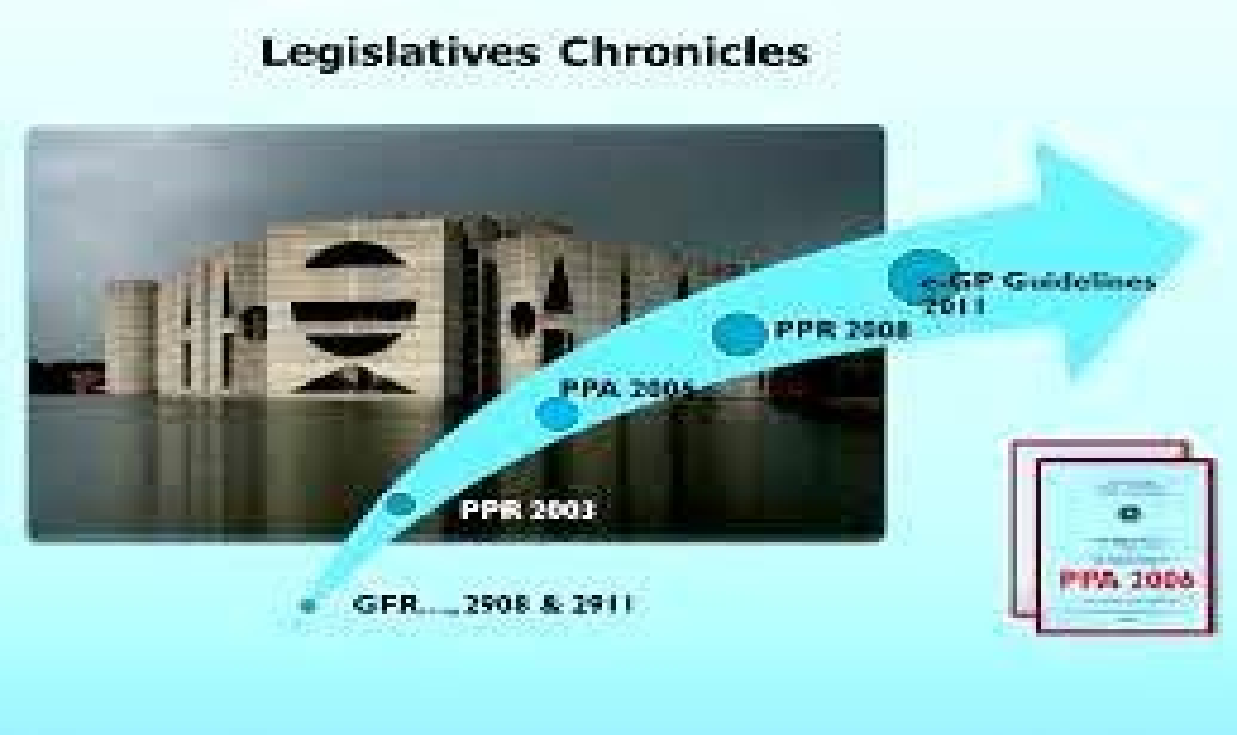

Figure 2.5: The evaluation of the e-GP guidelines

The e-GP guidelines were published by CPTU in the year of 2011 (www.wikipedia.com).

The e-GP System Access

The e-GP System is a web based system which encompasses the total procurement lifecycle and records the all procurement activities. The purpose of this system is to maintain complete and up-to-date Public Procurement System activities of all public agencies as well as provide tender opportunities to all potential tenderers from Bangladesh and abroad.

The entire public procurement activity undertaken by the government shall be channeled through the e-GP infrastructure and implemented in a phased manner. Efficiency in handling public procurement by the government organizations shall be enhanced through automation and process reengineering.

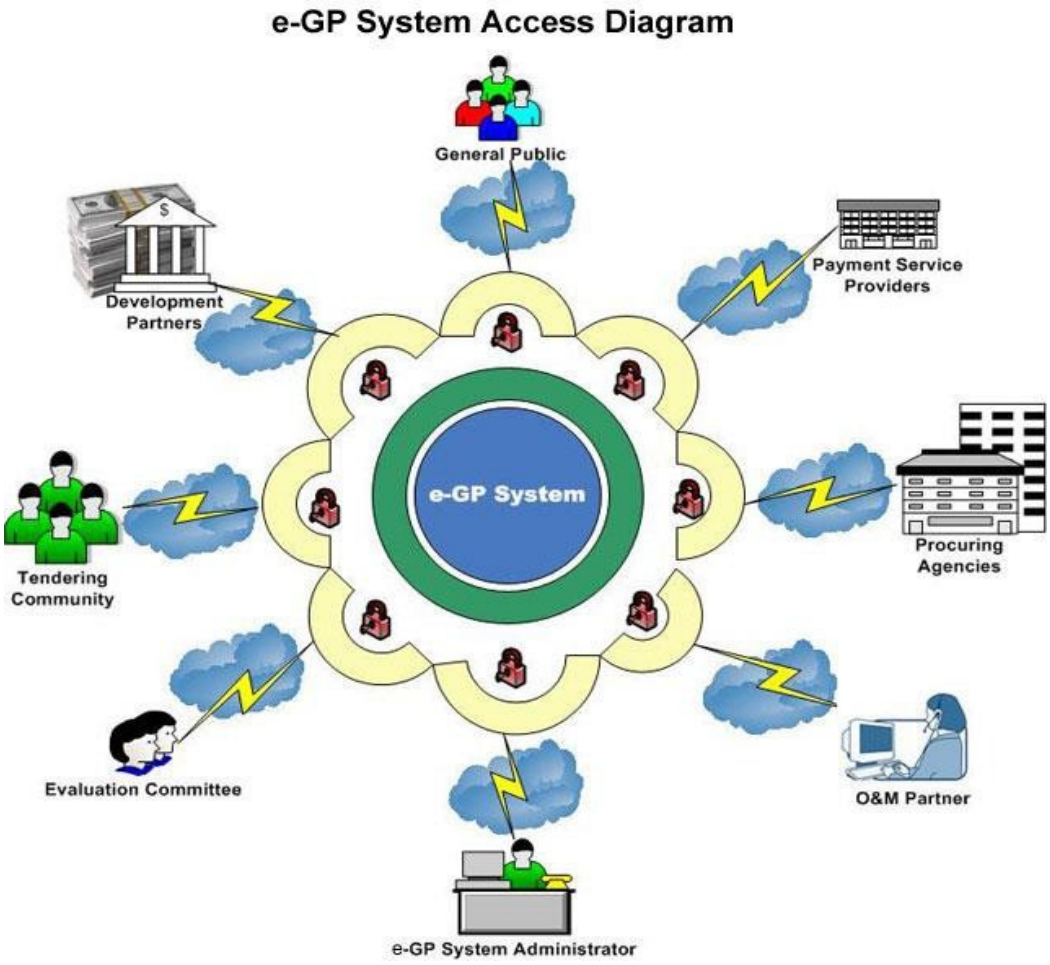

Figure 2.6: The e-GP System Access Diagram

The system shall enable the government to maintain a clear picture of its procurement activities on a real-time basis. By engaging in e-GP, the government catalyzes the supplier community to participate in e-business (e-GP Guidelines).

Modules of the e-GP System

The e-Government procurement (e-GP) is the collaborative use of Information and communications Technology (especially the Internet) by government agencies and other actors of procurement community in conducting all activities of Government Procurement Process Cycle (GPPC) for the acquisition of goods, works, and consultancy services with enhanced efficiency in procurement management.

This e-GP System Comprises of following key Modules/Functionalities:

- Centralized Registration System (Contractors/Applicants/Consultants, Procuring Entities and other actors of e-GP)

    - Centralized Tenderer /Consultant registration
    - Procuring Entity (PE) registration
    - Media Registration
    - Payment service providers registration
    - Development partners registration

- e-Tendering (e-Publishing/e-Advertisement, e-Lodgment, e-Evaluation, e-Contract award) System

    - Tender Document (STD) Library
    - Preparation and publishing Invitation to Tender
    - Preparation and Annual Procurement Planning (APP) preparation and publishing
    - Standard publishing Tender Document
    - Online Pre-Tender Meeting
    - Publishing Tender Corrigendum / Addendum / Amendment
    - Online Tender / Application / Proposal preparation by Tenderers / Applicants / Consultants
    - Online Tender Submission / Tender Substitution / Tender Withdrawal
    - Online Tender Opening
    - Online Tender Evaluation by Technical Committees
    - Post Qualification
    - Online Negotiations
    - Issuance of Notice of Award (NOA)/ LOI
    - Online Contracts

- Procurement Management Information System (PROMIS)

    - Compliance monitoring through key procurement performance indicators
    - MIS reports

- Workflow management System

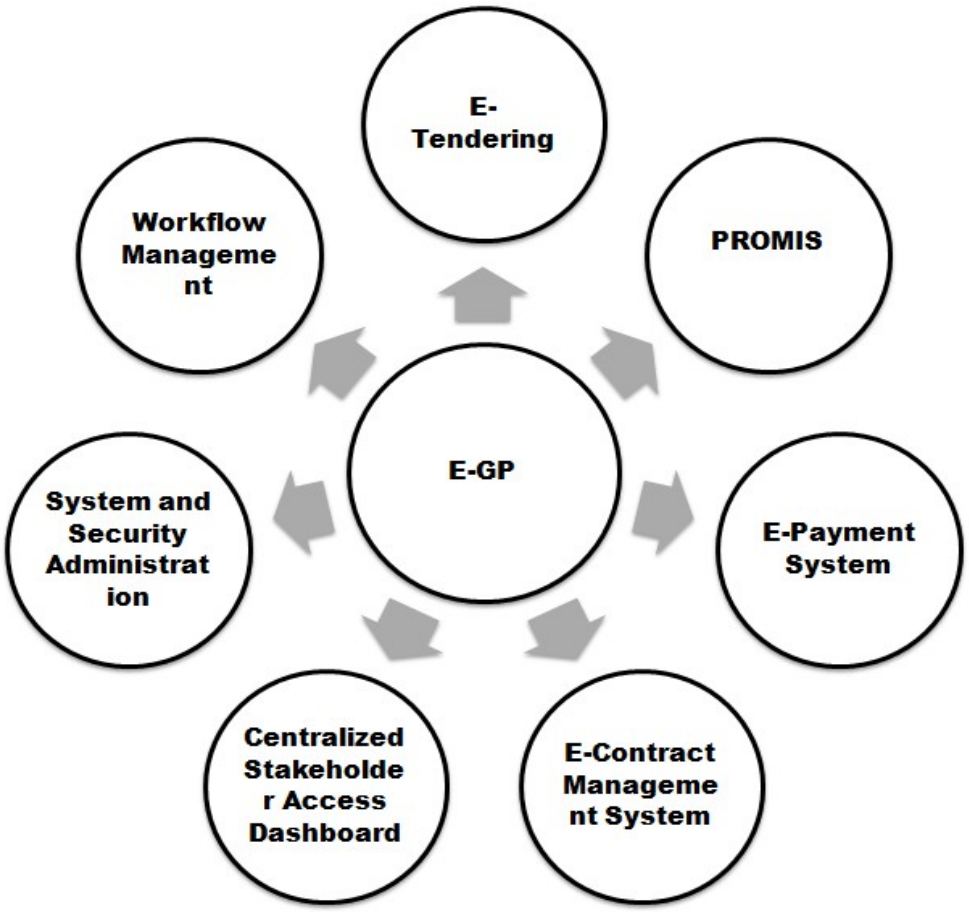

Figure 2.7: Modules of the e-GP System

- e-Contract Management System (e-CMS)

  - Work Plan Submission
  - Progress Report generation, submission / acceptance
  - Defining Payment Milestones
  - Running Bill Payment Processing
  - Variation Order / Repeat Order
  - Quality certification
  - Work Completion Certificate
  - Final Payment
  - Supplier Rating
  - Complaint and resolution database

- e-Payment System

    - Registration Fee, Tender document purchase fee, and other services fee Collection
    - Receive Tender Security and performance security submission
    - Transactions for security release and forfeiture handling

- System and Security Administration

    - E-Signature (Generation of Hash/Signature)
    - PKI based digital signature
    - Bid Encryption/ Bid Decryption
    - 128 Bit SSL

- Handling Errors and Exceptions
- Application Usability & Help

    - Integrated Inbox / Message Box
    - Integrated e-Mail / SMS Gateway
    - Dashboards for Procurement Performance Monitoring
    - Manuals for all users

The objective of establishing e-government is to materialize the run-up to a Digital Bangladesh. On all fronts of governance there should be electronic operation to save time, reduce hassles and ensure transparency through widening access to public information. As part of that process, the government has initiated the process of electronic government procurement (www.eprocure.gov.bd).

Chapter Three
Benefits of e-GP over traditional procurement process

Manual and Electronic Public procurement

Traditionally procurement is done face-to-face, via telephone or through formal open or limited tendering process, while e-procurement is generally done online. Procurement is really a collection of processes that involve many steps and interactions with the other departments of a company and with suppliers. Because purchasing costs typically run to 50% of operational costs, the procurement process provides many opportunities for cost savings that can make a great difference to a company's bottom line. The rule of thumb is that a 5% savings in purchasing costs can increase profit by 50%, and would equal an increase in revenue of 50%, or a reduction in overhead costs of about 20% (The Daily Sun, 2016).

That is why the procurement process has evolved. Traditionally, procurement was paper- and conversation-based, usually with procurement officers interacting with long-time partners or well-known suppliers and purchasing at fixed prices. In recent years, this has changed somewhat to become a strategic function: Procurement officers seek suppliers that fit with a company's overall strategy.

E-procurement is the electronic purchase and sale of goods and services, usually through an Internet-based platform. It is a tool designed to improve the purchasing process transparency and efficiency and help companies capture savings. E-procurement involves moving the procurement process online to cut out steps and save money. For example, traditional procurement involves getting quotes and then approval, probably from finance, as well as a purchase order, which could take more than a week. With e-procurement, this process is simplified and speeded up considerably, thanks to real-time interaction with pre-approved suppliers and trading partners, who can be anywhere in the world. With online purchasing, the purchase can be approved online and the order completed within minutes; the required item often arrives within days.

In today’s world, time is money, so the more a company can reduce staff time involved in purchasing, and the more quickly it issues a purchase order, the more it can reduce operational costs.

One of the key areas of debate currently in the public procurement sector is the how e-procurement can be harnessed to improve the efficiency of organizations and thus can be used to support the drive for organization profitability.

Some key differences between the manual and electronic procurement processes are –

Manual Procurement Process	Electronic Procurement Process
✓ Longer procurement cycle	✓ Shorter procurement cycle
✓ Expensive	✓ Economical- Fixed cost
✓ Huge paper works that increases the chance of human error.	✓ Less paper works and no chance of human error.
✓ Restricted mobility	✓ High mobility- Anytime, anywhere
✓ Wastage of space to store the bid documents	✓ No space is needed to store documents; all the documents can be stored in a CD for lifetime.
✓ Not retrievable	✓ Easily retrievable, one click access.

The benefits of e-procurement over traditional procurement methods, has compelled the organizations to move to e-procurement for the need for process efficiency improvements and the need to improve process compliance.

The Benefits of Electronic Public Procurement over the Manual Procurement

Both the procurement process has advantages and disadvantages. Given the vast benefits of e-procurement over traditional procurement methods, the reasons organizations have for moving to e-procurement can generally be divided into two main categories: the need for process efficiency improvements and the need to improve process compliance.

a) Improve process efficiency: For companies still stuck with email or other traditional procurement methods, the move to e-procurement is often due to a desire to improve their purchasing process efficiency. E-procurement will streamline their processes. These companies will see:

- an improvement in oversight,
- a decrease in request-to-purchase cycle time, and
- an increase in the number of events per buyer.

b) Improve compliance: Companies with clear processes already in place have reasons for moving to e-procurement that fall into this category. Perhaps they are already using an incumbent e-procurement tool, but they still have issues with buyer compliance due to the

tool's cumbersome nature. By implementing a more flexible, intuitive cloud-based e-procurement solution, these organizations can improve compliance; thereby bringing more spend under management and increasing their cost savings. These companies will see:

- improved data visibility and management,
- increased RFP process transparency, and
- Spend optimization.

Now-a-days in the public procurement sector it is the major concern to identify that how e-procurement can be harnessed to improve the efficiency of organizations and thus can be used to support the drive for organization profitability.

Advantages of E-Procurement

There are many benefits to be found from using e-procurement within an organization, and the following are just some of the key points:

a. Reduced Transaction Time: individual business activities (transactions) can be completed much more quickly; they are not restricted by office hours and may not even need human intervention, thus increasing the capacity to complete transactions on a real-time basis. This means that downstream processes are not constrained by waiting for transactions to be completed. In the e-GP process the whole world is a tender box.

Figure 3.1: The whole world is a tender box in e-GP

So the time is saved in the process of purchasing.

b. Electronic catalogues: the development of e-catalogues has enabled organizations to market their product offer electronically, this has been a fantastic marketing tool for sellers and for buyers, there is price transparency and buyers can compare offers from various e-catalogue vendors. Thus the value for money (VFM) can be achieved.

c. Increased Standardization: With the electronic catalogues mentioned, there has been a move by some suppliers to offer a more standardized offer, thus allowing buyers to easily compare the offers from e-catalogues; however care must be exercised in these comparisons as it is difficult to assess the quality of products without samples. If in doubt request samples and take time to make your own assessment. The great news is that most catalogue sites operate in a very similar way, and they are very easy to set up allowing multiple business users to undertake some of their own procurement. This keeps the business running, sourcing the day-to-day needs of the business and allows procurement people to continue to develop great value-adding relationships.

d. Wider Spread Supplier Bases: Because the virtual e-procurement portals are web-based, buyers can search suppliers worldwide, meaning a wider selection of products and services are available to the organization meaning that when items are not available locally, it is still possible to source these. It is important to remember the time and cost of shipping goods, but it's great to know that it is possible to source items from somewhere in the world.

e. Simplified Global Procurement: With the e-procurement applications supporting various languages, currencies, international taxation and financing, shipping regulations and more, it is simple for buyers and suppliers in different countries worldwide to communicate and co-operate.

f. Increase Productivity: As e-procurement automates some of the procurement and wider business processes typically handled by employees, this will free up time for the team to spend on more strategically significant functions and tasks. It eliminates the common human errors and increases the productivity of the whole process.

Figure 3.2: increased productivity through electronic procurement

For example with automated matching of invoices, goods can be ordered, processed and paid in a matter of minutes; the key however is to ensure that the supplier is set up in the buyers systems support as much automation as possible.

g. Simple Configuration and Scalability: E-procurement applications can be configured to suit the individual needs or both the buyer and the supplier, and can grow with the organization as needs be. It is important to select suppliers for both the current requirement as well as possible future need so gaining an understanding of the technical infrastructure development plans of suppliers will help buyers to select possible longer term partners.

h. Creation of Trading Communities: Because the e-procurement applications are internet based, they allow for both vertical and horizontal trading communities to be developed. This means buyers can consolidate buying power and it also opens up opportunities for new supply chains. The opportunity to consolidate the requirements of smaller buyers via consortia or trading communicates has enabled smaller business to access prices historically reserved for bigger buyers, thus fuelling a fast developing SME sector. Many Chambers of Commerce and other local business organizations operate such buying communities.

i. More Cost Efficient: With the time reductions and increased supplier selection, development of trading communities, more opportunities for purchasing surplus goods and services at below market price, and much more, it isn't surprising that e-procurement proves to be much more cost efficient than traditional procurement.

j. Savings from Increased Preferred Vendor Purchasing: E-procurement makes it easier to purchase products and services from preferred vendors. The more you purchase from the same preferred vendor, the more you typically save at a unit cost level as they often apply quantity discounts. In addition you have confidence about your sources of supply, making sure you have the right quality for you needs.

The hassles in dropping tenders have been a much talked about issue here in Bangladesh during the traditional tendering process.

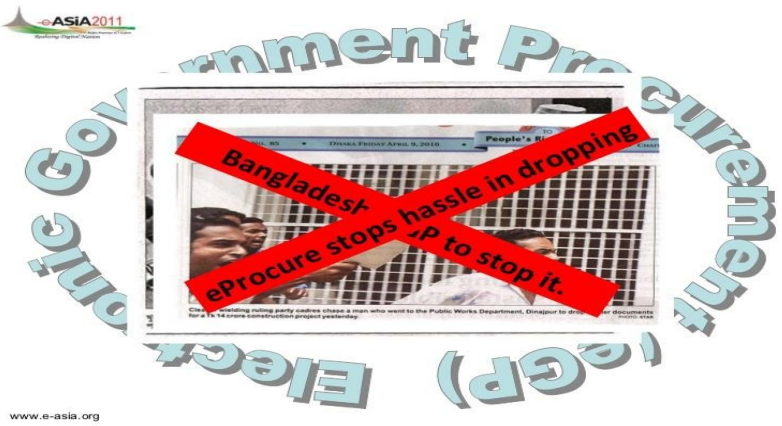

Figure 3.3: Hassles in dropping tender has been eliminated in the e-GP

In the e-tendering systems, fair businessmen participate in the tender. The tenderer also get original vendor to purchase the things.th e-GP not only to saves time and cost but also enhances competition and competitiveness, bring transparency and remove corruption in the process of procuring goods, works and services. And thus the organization enjoys savings from preferred and efficient vendor purchasing

k. Consolidation of Preferred Vendors: Some low-volume vendors may eventually become eradicated from the network of suppliers via e-procurement, resulting in more purchases being directed to preferred vendors and increased discounts becoming available. However specialist suppliers are better able to continue to operate in an e-procurement environment due to lower transaction costs.

l. Spot Discounts: Reduction of excess inventory by suppliers for a limited time can easily be applied with the dynamic nature of online pricing, meaning large organizations can take advantage of significant savings by purchasing at the right time. Key here is to keep close to the market, setting up alerts to highlight significant changes.

m. Reduced Time/Cost of Transactions: Because e-procurement automates a large chunk of the procurement process, it reduces the time and money spent on the purchasing cycle as a whole.

n. Reduced collusion: There is a significant reduction in the collusion which was a common practice in the traditional tendering process.

Figure 3.4: Reduced collusion in procurement process

In the traditional procurement process often the risks of fraud, corruption and collusion are faced. Wrong people forcefully get the work from different projects though they don't have any experience. In e-tendering systems have been introduced, the experienced, fair businessman will participate in the tender. The tenderer also get original vendor to purchase the things. It will thus not only save time and cost, but also enhance the competition and competitiveness, bring

transparency and remove corruption in the process of procuring goods, works and services (Mahmood, S. A. I., 2010).

Some other major benefits of e-GP include the followings:

A. Development Impact:

The major impacts on the development are as follows-

i. Breaking down the physical barriers of space and time, e-GP allows a more transparent and efficient information flow as well as improved access to information and services. Beneficiaries include not only governments and suppliers but also the public at large in having access to transparent information on the public expenditure of taxpayers' money.

ii. E-GP facilitates higher quality outcomes for public procurement through improved accessibility and interoperability, which enable:

iii. greater business access and competition for government expenditure (creating commercial benefits for business and price and quality gains for government);

iv. integration and automation of many workflow processes for transactions and other supply chain management activities improving efficiency and reducing processing costs; and

v. greater and easier access to real time and historic information for management and audit (enabling higher quality decision making and planning as well as greater transparency and accountability).

vi. The implementation of e-GP offers the opportunity of adding value to the relationship between government buyers and private businesses. An effective e-GP program can deliver a broad range of benefits to taxpayers, the economy and the community generally. Online technology provides the potential to significantly reform the accountabilities and performance of public procurement systems.

B. Enhanced Transparency & Compliance:

The Electronic government procurement enhances transparency and compliance in the following ways-

i. At an early stage, e-GP can provide access to a whole range of public procurement information at low cost and independently of time and location. Governments achieve a high level of transparency if they use the Internet for the free disclosure and distribution of public procurement information. Such information typically include the relevant legislation, policies and guidelines, procurement plans and notices, bidding

documents, minutes of procurement activities, and contract award results. In reducing the asymmetry of public procurement information, e-GP contributes to increasing the competition in terms of quantity (participation) and quality (openness and fairness).

ii. The application of online technologies can ensure compliance with the existing procurement policy end legislation. An e-GP system can automate the required procurement procedures thus allowing neither purchasing agencies nor bidders to deviate from the public procurement process. In this way, e-GP helps governments to reduce the opportunities for corruptive practices.

iii. While enhanced compliance contributes to avoiding corruption and fraud, the transparency of real-time procurement information allows the early detection of corruptive and fraudulent activities. In addition, e-GP contributes to reducing corruption and fraud by conducting the procurement process online and collecting all procurement data into a securely operated electronic system. Consequently, in-person contacts between purchasing agencies and bidders are no longer required, the risk of manipulating procurement information and documents can be minimized, and the availability and completeness of public procurement audit trails can be improved.

C. Increased Performance & Quality:

The e-GP increases the performance and quality in various ways, such as-

i. The benefits of online technology for the efficiency and effectiveness of government operations reflect the impact of e-GP on the cost of transactions and value-for-money outcomes.

Figure 3.5: Banner on e-GP showing the improved quality of the procurement process

ii. The potential impact of e-GP on the cost of transactions is linked to savings that are related only to workflow and include significant savings in time due to the automation of the procurement procedures for both sides - purchasers and bidders. The fact that bidders do not have to travel any more to submit a bid in paper, does not only prevent coercive practices, such as physical attacks on bidders on their way to submit the paper bid, but also saves bidders a lot of time. Transaction costs of the public procurement process drop considerably by using the less expensive

Internet rather than print media as public procurement information channel and reducing paperwork in general.

iii. Price reductions can be achieved as a result of three intrinsic e-GP features: price transparency, stimulation of competition, and innovative public procurement procedures. Price transparency by disclosing contract award results online has reportedly avoided the conclusion of overprized public contracts and contributed to adjusting prices for goods, works, or services in line with true market price levels. The online publication of procurement notices provides an effective tool to reach out to private businesses in the market thus increasing the participation in public procurement. To this end, increased competition contributes to reducing the prices paid by the government. Innovative approaches in the area of public procurement include the managed aggregation of demand and electronic reverse auctions, when lower prices can be attributed to aggregated purchases and to online negotiation respectively.

iv. In addition to the measurable outcomes, e-GP can be expected to provide significant but less quantifiable benefits through greatly improved management information and analysis. Currently, most large government organizations will have only limited insights into the wealth of public procurement information scattered around in multiple data formats and different archives and places. The application of digital technology for procurement information disclosure and transactions lays the foundation for the collection of those data, which provide the basis for performance measuring and monitoring. Besides the safekeeping of public procurement information and data, e-GP ensures a much higher quality of public procurement reporting and decision-making.

D. Economic Development:

The e-GP has a great impact on the economic development-

i. The level of transparency, compliance, performance, and quality of public procurement due to the application of e-GP can achieve a dimension, which does not only provide for the development of a public procurement system that meets internationally recognized standards but also establishes the basis for a sound market economy with significant gains in productivity and competitiveness.

ii. The efficiency gains due to the application of e-GP can have a clear economic impact. The total public procurement volume of a national economy typically counts for 10 to 20% of the GDP. Procuring only 10% of all public purchases through electronic means with a moderate 10% in price and cost reductions would result in total annual savings equal to one percent of the GDP (World Bank report, 2015).

iii. With government accounting for a substantial proportion of the economy, the speed of take-up of technology by the economy will be significantly influenced by the rate of government adoption. To this end, e-GP catalyzes e-commerce and encourages the participation of small and medium enterprises, promotes the use of modern technology and the implementation of a national technological infrastructure, and supports the development of appropriate capacity and skills with the overall objective of economic growth and development (World Bank report, 2015).

Modern e-procurement tools make the process vastly more efficient; buyers save time and management can easily access the data from a centralized and visualize the outcome based on information from past events.

While e-procurement does include electronic purchases performed via an EDI (electronic data interchange) or ERP (enterprise resource planning) system, the most efficient and cost-effective tools available today are cloud-based. Also known as software as a service (SaaS) solutions, these tend to have a shorter time to value since nothing needs to be installed on premise, and implementation can occur within hours or days, rather than weeks or months.

Chapter Four
Challenges in implementing e-GP in Public Works Department (PWD)

Introduction

We all know that Local government structure of Bangladesh has two parts Urban and Rural. Urban administration is related to the administration of civic needs and planning of a particular legal area. This administrative system has the presence of urban municipal government in the intermediate and small towns and other special authorities in the big municipal cities. Along with the formal urban governments there are also some of the special development and special purpose authorities to meet the growing demand of urban services. Each of the authorities has different specific functions, where Public Works Department is regarded as an important one.

Public Works Department (PWD), under the Ministry of Housing and Public Works, is the pioneer in construction arena of Bangladesh. Over about two centuries,

Figure 4.1: The Public Works Department of Bangladesh

PWD could successfully set the trend and standard in the country's infrastructure development. It plays a pivotal role in the implementation of government construction projects. It also undertakes projects for autonomous bodies as deposit works. Public works Department has highly qualified and experienced professionals forming a multi-disciplinary team of civil, electrical and mechanical engineers who work alongside architects from the Department of Architecture. With its strong base of standards and professionalism developed over the years, PWD is the repository of expertise and hence the first choices among discerning clients for any type of construction project in Bangladesh.

Figure 4.2: Some important projects of PWD (at the left- the national secretariat building, at the right- the public administration training academy)

Besides being the construction agency of the Government, it performs regulatory function in setting the pace and managing projects for the country's construction industry under the close supervision of the Ministry of Housing and Public Works.

A major portion of the development budget of the Bangladesh government is dedicated to the construction works undertaken by Public Works Department (PWD). Some examples of the important projects undertaken by PWD are as follows-

- ✓ PWD has constructed and handled about 200 residential flats to the government employees in last three years.
- ✓ Completed the construction of 100 flats of 1800 square feet.
- ✓ Completion of the 10 flats out of 20 flats for the Honorable Ministers in Mintu road of Dhaka City.
- ✓ Taken as well as completed the construction of 668 flats under the project of Special Apartment Implementation.
- ✓ Completed the construction of the auditorium of Dhaka officer's Club.
- ✓ 61 flats in Rangamati district.
- ✓ Maintenance and enlargement 1460 flats of Motijil and 392 of Khilgaon colony.
- ✓ Taken the project to construct 240 flats in the Azimpur colony.
- ✓ Engineering Staff college project.
- ✓ Working to solve the residence problem many of the government employees. For this they have taken the project of building 16 new building in place of 9 old buildings in Motijil government colony.
- ✓ 607 flat construction project for the government employees.

So it is very crucial to ensure the effective and efficient use of this public fund by PWD. In that vision the Electronic Government Procurement (e-GP) was introduced in PWD in the year of

2013 to ensure operational efficiency, transparency and accountability in public procurement, enhanced citizen's engagement, and effective delivery of public services (www. pwd.gov.bd).

Extend of e-GP in Public Works Department (PWD)

The Electronic Government Procurement (e-GP) was first introduced in PWD in the year of 2013. There has been a significant savings in the cost after the introduction of e-GP.

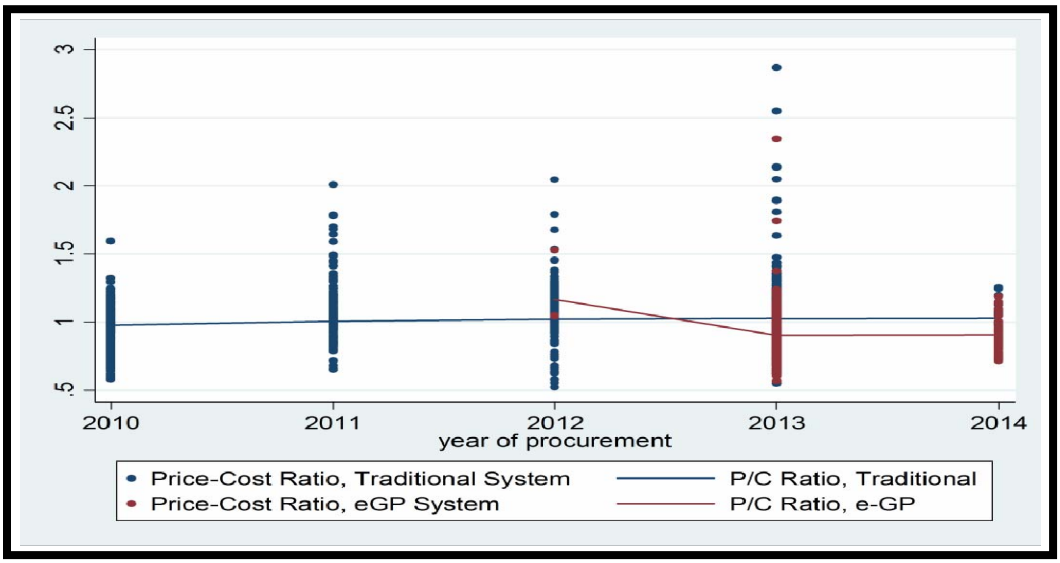

Figure 4.3: The Price/Cost ratio in the two procurement systems

To attain sustainability and to ensure continuous improvement in the sector of efficient electronic procurement system Public Works Department (PWD) has taken numerous steps. Some of their major steps are as follows-

a. At the end of the fiscal year at June 2013, PWD had successfully undertaken twenty percent (20%) of their total procurements through the electronic procurement system (PWD annual progress report, 2014).
b. PWD is using the official website of their organization (http://pwd.gov.bd/) and the official website of CPTU (http://www.cptu.gov.bd/) to advertise all their tenders.
c. By the year 2014 Public Works Department has published various necessary documents on e-GP which are available on their official website-

- ✓ e-GP System User Manual - Authorized Officer User
- ✓ e-GP System User Manual - Authorized Users
- ✓ e-GP System User Manual - External Evaluation Committee User
- ✓ e-GP System User Manual - Head of Procuring Entity User
- ✓ e-GP System User Manual - Organization Admin
- ✓ e-GP System User Manual - PE Admin

- ✓ e-GP System User Manual - Procuring Entity User
- ✓ e-GP System User Manual - Secretary User
- ✓ e-GP System User Manual - Tender Evaluation Committee User
- ✓ e-GP System User Manual - Tender Opening Committee User
- ✓ e-GP System User Manual - Tenderer - Consultant
- ✓ E-GP Guidelines
- ✓ E-GP Registration & Tendering (Bangla)
- ✓ E-GP Registration & Tendering (English)
- ✓ E-GP System User Manual for Procuring Entity (PE) User

d. PWD has introduced a new Help Desk for any kind of help regarding e-GP, which provides a 24/7 service to all the people participating in the procurement process of PWD.

e. PWD has strengthened their Management Information Systems (MIS) team by increasing their manpower. This unit consists of fifteen members including one Executive Engineer, one Sub-Divisional Engineer, three Assistant Engineers and six Sub-Assistant Engineers.

f. PWD has strengthened their Management Information Systems (MIS) unit by updating the IT infrastructure.

Figure 4.4: The New MIS Cell of PWD

The following services are being provided by MIS cell-

- ✓ Maintaining network administration and maintenance
- ✓ Sharing of services (file service, mail service, database service etc) through the network
- ✓ Hosting of servers for different services (web service, mail service, domain control service etc) and data security
- ✓ Client support

- ✓ Administration and maintenance of Data backup and maintenance Database application/software (Human Resource Information System, Project Monitoring System etc)
- ✓ Administration and maintenance of Internet service to all officers of PWD head office

MIS Cell is closely working with the Access to Information Project (A2I) of the government and involved in piloting National Electronic Service System. It is also working with CPTU to introduce E-GP in PWD. Besides, MIS Cell is working with "Development of National ICT Intra-Network for Bangladesh Government (BanglaGovNet)" of Bangladesh Computer Council (BCC).

g. They have trained all of their employees who are working in the procurement team under the project of PPRP-II, which is being financed by the World Bank.
h. PWD has total 30 members who have been trained for 14 months under the supervision of Chartered Institute of Procurement and Supply, United Kingdom to enhance their professional skill in procurement.
i. PWD is also undertaking training program for the employees of PWD as well as for the tenderers on the e-GP system by their highly efficient trainers.

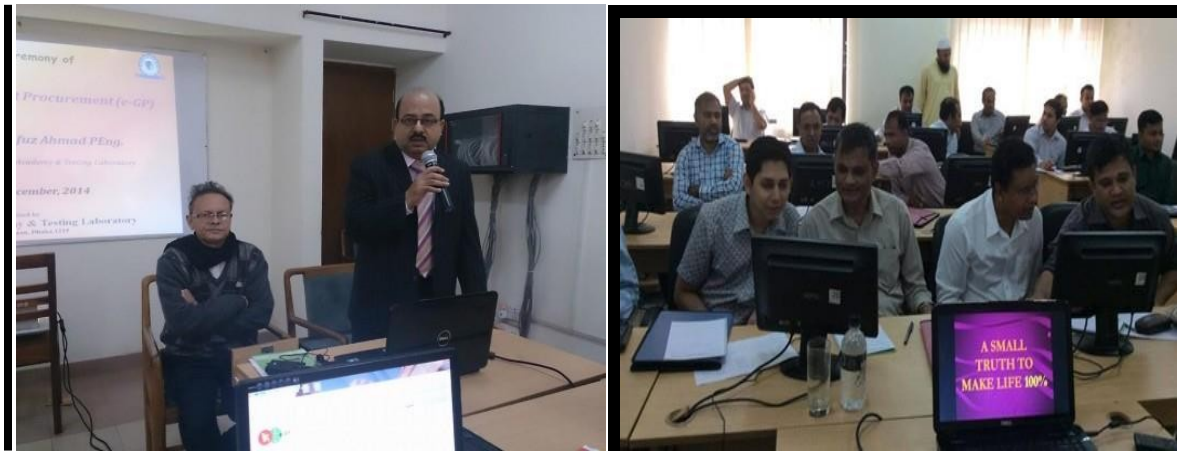

Figure 4.5: e-GP training by PWD

j. In the June/2015 PWD had undertaken eighty percent (80%) of their total procurement process through the electronic government system.

Public Works Department (PWD) is fully determined and optimistic about incorporating e-GP in their procurement system full-fledged. To attain this objective PWD is working constantly on developing their manpower skill and the necessary infrastructure. PWD has set the target to

execute their total procurement process through the electronic procuring system by the end of the fiscal year 2017 (www.pwd.gov.bd).

Challenges in Implementing e-GP in Public Works Department (PWD)

Implementing e-procurement is, at its core, an exercise in change management. As with any major organizational changes, upper management buy-in is the key. The values of e-procurement must be clearly communicated to all stakeholders; from the top on down, or else there will be the risk of trying to make changes without the proper authority, which, in turn, will lead to high levels of non-compliance.

That being said, the other barrier to implementation organizations used to face was the high upfront cost for installation and licensing along with the extensive training required to use the tool. However, this is no longer the case. The growing number of cloud-based procurement solutions has lowered the barrier to implementation to the point that even small businesses can take advantage of all the benefits e-procurement has to offer.

The declaration for building a Digital Bangladesh has infused a sense of awareness into the minds of the citizens about the necessity and importance of going digital. In Bangladesh, about 75 per cent of the development budget is spent on procurement. In which a major portion is used by the Public Works Department (PWD). The following charts show the amount of allotment in the yearly development and non-development funds of PWD for the last 5 years (PWD annual financial report, 2015).

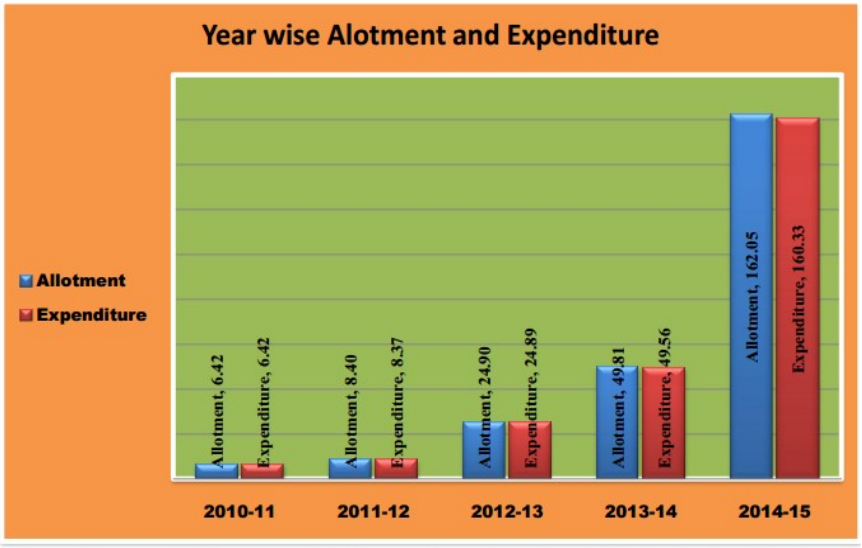

Figure 5.1: Allotment in the development funds in last 5 years (in PWD)

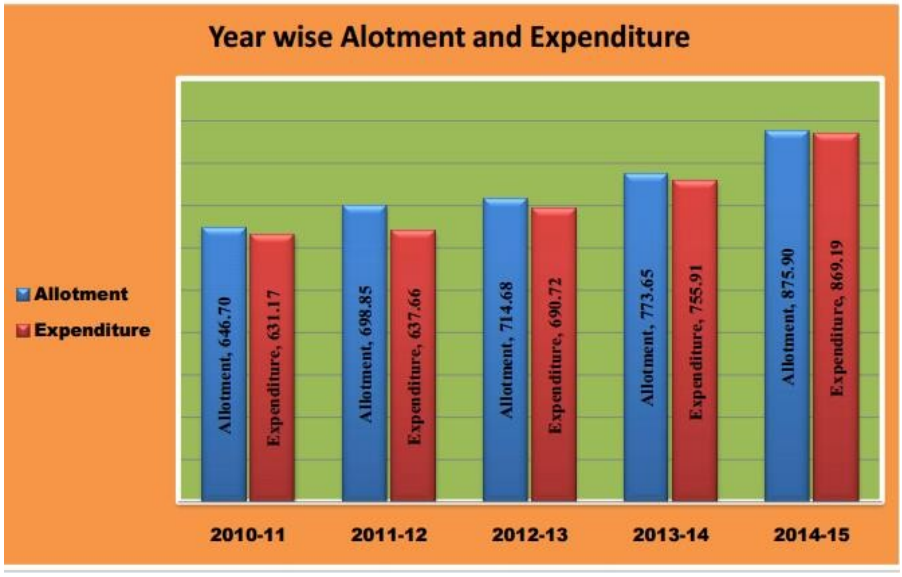

Figure 5.2: Allotment in the non-development funds in last 5 years (in PWD)

The Public Procurement Act 2006 and the Public Procurement Rules 2008 are now in force to ensure transparency and accountability in the process of government purchase with the public funds, the source added. The Central Procurement Technical Unit (CPTU) of the Implementation Monitoring and Evaluation Division (IMED), under the Ministry of Planning has been working in line with the government on the implementation of e-GP in all the government organizations including Public Works Department (PWD). Under the Public Procurement Reform Project-II (PPRP-II) supported by the World Bank, e-tendering is being implemented.

The major Challenges in implementing e-GP in PWD are as follows-

- ☐ The complexities and risks of e-GP program implementation are frequently misunderstood. Effective e-GP implies that changes occur across areas of personnel and executive behavior, skills, regulations and legislation, operational policies, and business behavior. Few, if any, of these changes will occur simply through the acquisition of some hardware and software, and if this is the understanding and intended starting point to e-GP then jurisdictions may find that the funds might better be spent on other priorities.
- ☐ The full benefits resulting from e-GP adoption will only be realized through significant changes in the organization of public procurement operations and as such will require effective change management and excellent leadership bringing about collective commitment across government constituents and partnership with the business community. In the absence of such change management and leadership, the outcome may be at a net cost with technologies operating alongside or simply replicating traditional operational methods.

- Rather than being a technological add-on to an already complex environment, e-GP needs to be understood as a tool to reform public procurement underpinned by an appropriate policy and legal framework, effective buyer and supplier activation including strong awareness and capacity building programs, technological infrastructure development, established standards, and sustainable operational e-GP applications.
- Only if governments understand the potential benefits of e-GP and demonstrate professional leadership and political will in managing the e-GP program adoption as an integral part of reforming their public procurement systems, they will be able to tap the full potential of e-GP and move forward their development agenda on the basis of increased public procurement governance and performance standards.
- People and businesses that do not have access to the Internet cannot take part in the supplier selection and contracting process at county level. So it is a big challenge to ensure the effective participation of all the people and businesses to the e-GP program.
- There can also be problems with malfunctioning of the system, to the point where countries have been unable to promptly pay bills to suppliers, causing problems for those firms and creating a crisis of confidence in the process.
- There are also issues with the infrastructure that is needed to support electronic procurement. In some cases, the system has had very limited availability.
- Some observers see this as a push-back against the anti-corruption aspect of the system. But the government does need to show that it is doing everything possible to make this a success, and these do seem to be fundamental issues.
- The most important point is that it is not enough to just have a system. It is (as we mathematicians say) a necessary but not sufficient condition for achieving successful e-Procurement. So that having the technical infrastructure for e-Procurement is vital. A reliable Internet service that can be accessed reliably by the supply market is essential if this is to work well.
- Then, we need a supply market that is sophisticated enough to use e-Procurement. It is not enough to have a system and Internet connections – the suppliers need to know how to use the system and be prepared to use it. The particular risk is that the smaller, local suppliers will lose out, because they are the potential suppliers who do not have the equipment, knowledge or resources to access the system. Given that virtually every government and contracting authority wants to promote local business, and small, dynamic, innovative firms, then this is critical.
- As well as the market must have capability and capacity amongst the staff who are going to operate the e-Procurement system and process. That appears to be another issue in e-GP implementation.
- Another major issue in the implementation of e-GP is the stakeholder buy-in that again is necessary for a successful implementation – indeed, necessary for any major change programme really. If there is resistance to the new system, even if it is not obvious or

overt, then when anything goes wrong, those who oppose it will jump on that immediately.

The e-procurement holds vast potential to enhance the diversity of the supplier base and save states money over the long term. So it's worth the trouble to overcome the challenges to get the reward of the successful implementation of e-GP in the Public Procurement System (Jones, 2007).

Chapter Five
Analysis and Findings

The role of e-procurement in strategic sourcing

Strategic sourcing is an essential part of procurement. In an effort to get the most value out of the procurement function as possible, organizations are moving away from reactive and tactical sourcing to strategic sourcing. According to CIPS (Chartered Institute of Procurement and Supply), strategic sourcing means, "satisfying business needs from markets via the proactive and planned analysis of supply markets and the selection of suppliers with the objective of delivering solutions to meet pre-determined and agreed business needs."

E-sourcing is essential to strategic sourcing. While strategic sourcing can be put in place without e-sourcing, numerous studies have shown that it is impossible to reap the full benefits of this process without the implementation of an e-sourcing tool. By implementing an e-sourcing tool along with their strategic sourcing processes, companies can anticipate savings of 15% and more, better manage their spend, and see an Return On Investment (ROI) in a matter of days or weeks(Lennerfors, T. T., 2007).

The role of World Bank in implementing e-GP

The World Bank is supporting the government of Bangladesh under the Public Procurement Reform Project-II (PPRP-II) in implementing the e-GP in the public procurement system (Islam. Z, 2012). The major roles that the World Bank is playing in this regard are as follows-

- ✓ Given the potential of e-GP for establishing public procurement systems that provide less opportunity for corruptive and fraudulent practices and meet internationally recognized standards in terms of governance, performance, and quality; the World Bank has a role to play in encouraging low- and middle-income countries to implement e-GP programs as part of their public sector modernization and development agenda.

- ✓ From a strategic perspective, the Bank puts growing emphasis on helping borrowers to implement and use e-GP as a vehicle of improving the transparency and efficiency of all public procurement rather than limiting these efforts to Bank-funded operations. The Bank promotes the adoption of e-GP in low- and middle-income countries as part of its lending and knowledge sharing operations. Increasingly, Bank loans and grants include the design and implementation of e-GP programs – as standalone projects or as components of larger public sector modernization projects. The Bank does not only provide funding but also technical assistance and advice in sharing good and bad practices of e-GP adoption in countries all over the world including their lessons learned.

In this way, the Bank helps Borrowers to move their public procurement online by adopting sustainable e-GP systems which, at the same time, are satisfactory and acceptable for the use under Bank-funded operations.

- ✓ The Bank provides assistance in implementing e-GP programs with the objective of using e-GP systems for public procurement including Bank-funded operations.

- ✓ The latest revision of the World Bank's procurement policies and guidelines in 2004 introduced the mandatory requirement of publishing procurement plans on the Bank's external website with free access. In addition, General Procurement Notices and Specific Procurement Notices of international competitive bidding and all consulting assignments under Bank-funded projects shall be advertised in the electronic portals of UNDB online and Market. Similar to advertising procurement notices, the results of Bank-funded contract awards resulting from international competitive bidding, direct contracting, and all consulting assignments are required to be published in the same two electronic portals.

- ✓ Besides the mandatory requirement of publishing procurement notices and contract award results for major Bank-funded projects, the latest guidelines provide the possibility of using electronic means for the distribution of bidding documents/Request for Proposals and clarification procedures as well as for the submission and opening of bids/proposals. The e-GP systems used for Bank-funded operations need to meet the principles of transparency, open and fair competition, equal access, no discrimination, and security of confidential data.

- ✓ The World Bank also operates increasingly institutional electronic applications with procurement functionalities in order to improve the transparency, compliance, and performance of the Bank's corporate and the borrowers' procurement operations.

The World Bank is providing guidance and tools for the design and implementation of e-GP program in the public sectors in Bangladesh based on international experience. In addition, the Bank's procurement anchor unit OPCPR is available for consultations and advice in the area of e-GP.

SWOT Analysis

SWOT analysis is a commonly used tool often used in strategic planning that looks at a set of internal and external factors in a simple matrix style report. It's an excellent tool when used in the early stages of strategic planning as used correctly its representative of the position at that point in time and can facilitate the gathering of information pertaining to the business.

SWOT stands for

- Strengths – internal strengths that can be used to exploit external opportunities
- Weaknesses – weaknesses within the company which result in a failure to capitalize on external opportunities
- Opportunities – available for the company to exploit
- Threats – external conditions which could cause damage to the objective or organization.

The SWOT analysis for implementing the e-GP focuses on the Strengths and Opportunities in the environment to overcome the Weakness and Threats. It is a very important tool for the effective implementation of the e-GP. As the implementation of e-GP is a strategic decision for PWD so it is better to do it in the planning stage of implementing.

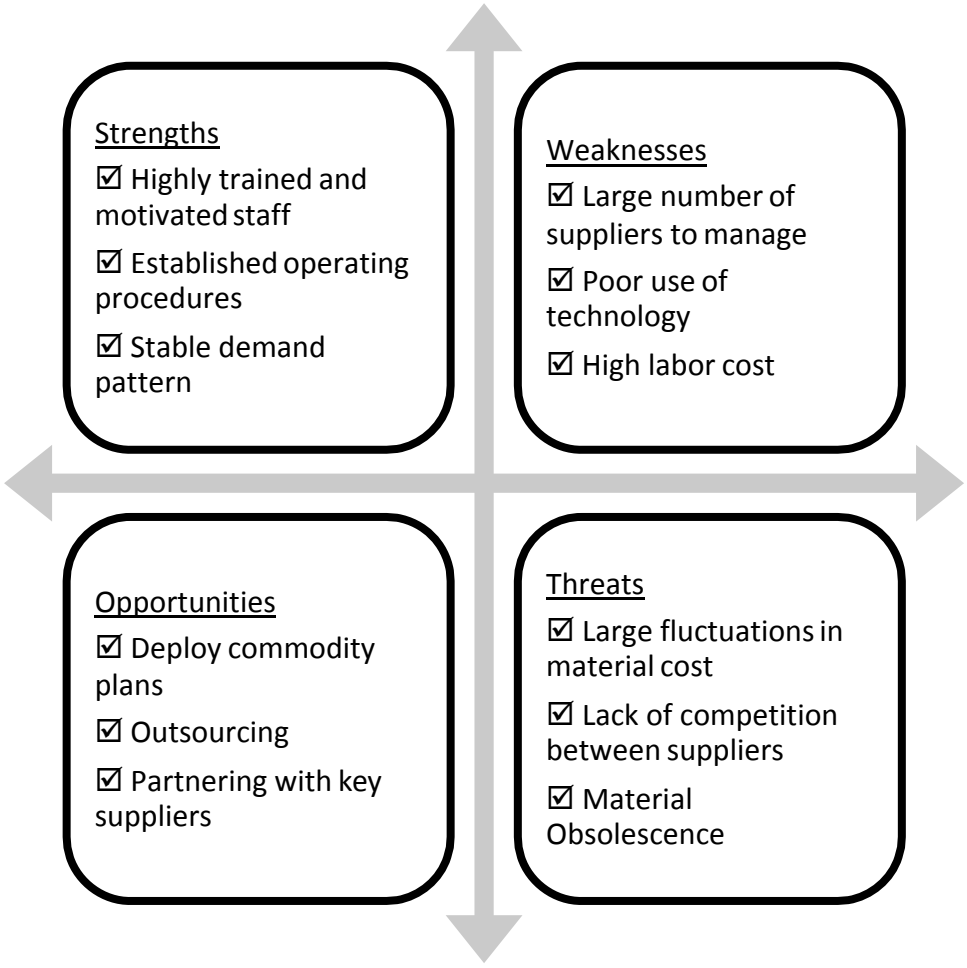

Figure 5.3: SWOT Analysis for implementing e-GP in PWD

Findings

The analysis results in the following findings-

- The IT infrastructure available for the implementation of e-GP among the general suppliers is not adequate. Many of the small suppliers do not have enough knowledge about the e-GP system process. Many of them also do not have easy access to the internet and computers. There is not enough scope for capacity development among all the users which is very crucial for the sustained growth of the e-GP
- There is no comprehensive legal framework available for the e-GP which must be compatible with the PPA 2006 and PPR 2008 rules and regulations.
- There is lack of effective change management and leadership to bring out the collective commitment across government constituents and partnership with the business community. Continuous training and improvement culture must be adopted in the public sector organizations.
- Due to the resistance to change from many of the suppliers there may be a risk of lack of competition in e-GP system.
- There is lack of effective knowledge management and central knowledge database for disseminate knowledge among the various public sector departments.

The e-GP presents building blocks for e-Government including- list of priority projects, action plan, milestones of the projects and resources allocation planning to maximize the delivery of quality and service to the citizens. It is the most efficient way to ensure the Value for Money (VFM) in the public sectors. So it is worth to take necessary steps to overcome the pitfalls of the system to ensure it's efficiency.

Chapter Six
Conclusion and Recommendations

Recommendations

The e-procurement holds vast potential to enhance the diversity of the supplier base and save states money over the long term. It also enhances the efficiency and transparency in public procurement through the implementation of a comprehensive e-GP solution to be used by all government organizations in the country. So it's worth the trouble to overcome the challenges to embrace the successful implementation of e-GP in the Public Procurement System. In this regard the government must take care in the following matters-

- ✓ The IT Infrastructure is a major requirement for the establishing of an e-GP system is the availability of IT infrastructure. IT infrastructure covering Internet Connectivity, Data Center and its corresponding Disaster Recovery site, Local and Wide Area networks, Security, Desktop Computers, Uninterrupted Power Supply (UPS), Multi-Functional Devices (MFDs) must be in place.

- ✓ A comprehensive legal framework is required for the establishment of e-GP which will be compatible with the PPA 2006 and PPR 2008 rules and regulations.

- ✓ Capacity Development is also very crucial for the sustained growth of the e-GP. The Service providers (Suppliers, Contractors, and Consultants) and Procurement Officers are the critical stakeholders in the whole e-GP process, hence as part of the process to enhance the readiness, capacity building programmes must be planned for the service providers to ensure that they are ready to prepare and respond to tenders which will be launched on the e-GP platform. Sensitization and training of Service providers (Suppliers, Contractors, and Consultants) as well Procurement Officers in the government agencies forms a major component of the implementation of the e-GP system.

- ✓ Effective training, continuous learning and rigorous knowledge management must be ensured.

- ✓ To ensure the effective change management and excellent leadership to bring out the collective commitment across government constituents and partnership with the business community.

- ✓ To ensure the effective participation of all the people and businesses to the e-GP program.

Conclusion

The government of Bangladesh has under the wider "Digital Bangladesh" project has displayed enormous commitment to the E-Procurement initiatives, while PPA and the entities who are involved in the pilot phase of the e-GP implementation are ensuring that the pilot phase succeeds to inform a nationwide rollout. The engagement of a consultant to assist the CPTU (Central Procurement Technical Unit) with the implementation and the recent study tour to India and England has confirmed the commitment to learn and adopt best practices as far as the e-GP is concerned. Benefits of an e-GP system cannot be over- emphasized. Complimenting government's efforts to ensure good governance, the CPTU is fully committed to see to the implementation of this project and continues to collaborate with all stakeholders to ensure its success.

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