

Report On

**Challenges and Prospects of e-Procurement in Public Sector in
Bangladesh: A Study on Health Engineering
Department (HED) under Ministry of Health and Family
Welfare, Bangladesh**

By
Md. Taifur Rahman
Student ID: 18182014

**An report submitted to the
BRAC Institute of Governance and Development (BIGD),
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Dhaka, Bangladesh**

**In partial fulfillment of the requirements for the degree of
MASTERS IN PROCUREMENT AND SUPPLY MANAGEMENT
(MPSM)**

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Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at Brac University.
2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I/We have acknowledged all main sources of help.

Student's Full Name & Signature:

Md.Taifur Rahman
Student ID : 18182014

Supervisor's Full Name & Signature:

Md.Saiful Islam
Executive Engineer (Project Management)
Health Engineering Department (HED)
Ministry of Health and Family Welfare

Letter of Transmittal

Full name of Supervisor

Designation,

Department

BRAC University

66 Mohakhali, Dhaka-1212

Subject: Report On Challenges and Prospects of e-Procurement in Bangladesh

Dear Sir / Madam,

This is my pleasure to submit a report submitted to the BRAC Institute of Governance and Development(BIGD), in partial fulfillment of the requirements for the degree of MASTERS IN PROCUREMENT AND SUPPLY MANAGEMENT (MPSM) which is required to complete the degree.

I have attempted my best to finish the report with the essential data and recommended proposition in a significant compact and comprehensive manner as possible.

I trust that the report will meet the desires.

Sincerely yours,

Md.Taifur Rahman

Student ID: 18182014

BRAC Institute of Governance and Development (BIGD)

BRAC University

Date: September 15th, 2020

Non-Disclosure Agreement

This agreement is made and entered into by and betweenand the undersigned student at Brac University

Acknowledgement

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Md.Taifur Rahman

Student ID: 18182014

Executive Summary

The aim of e-government growth is to implement a Digital Bangladesh. Electronic procedures should be used to be specific, streamlined, agile, minimize challenges and secure transparency by broadening access to public information for better governance. The government has launched a mechanism to incorporate electronic tendering into its public procurement system as part of that process. E-Tendering means carrying out, in electronic form, all traditional tendering activities using the internet. This has broadened the chances for competition. Securing openness, accountability, equal rights and fair competition is the core of public procurement. Research on the subject would also discuss accomplishments and challenges to the establishment of e-Procurement. Primary objective of this report is to examine opportunities and threats of e-GP in Bangladesh which are:

- Studying the latest e-GP practice in Bangladesh
- To recognize e-GP issues and challenges.
- Exploring the ability of e-GP

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List of Abbreviations

APP	Annual Procurement Plan
BPR	Business Process Reengineering
C&B	Construction and Building
GOB	Government of Bangladesh
CPTU	Central Procurement Technical Unit
DP	Development Partner
e-CMS	Electronic Contract Management System
e-GP	Electronic Government Procurement
EU	European Union
HED	Health Engineering Department
ICT	Information and Communication Technology
IT	Information Technology
IMED	Implementation Monitoring and Evaluation Division
KPI	Key Performance Indicators
MOHFW	Ministry of Health and Family Welfare
NOA	Notification of Award
OMME	Operation Maintenance and Management Entity
PAs	Procuring Agencies
PEs	Procuring Entities
PPA	Public Procurement Act
PPR	Public Procurement Rule
POC	Proposal Opening Committee
PROMIS	Procurement Management Information System
RFP	Request for Proposal
SPSS	Statistical Package for the Social Sciences
SSL	Secure Sockets Layer
TEC	Tender Evaluation Committee
TOC	Tender Opening Committee
WB	World Bank

Chapter 1

Introduction

1.1 Background:

The 2008 PPR is a complete public procurement document which, with the permission of the appropriate authority, provides scope for procurement on the basis of different methods, according to requirement and circumstance. Time was accelerating. The central necessity of the modern world is advanced technology. It is now globally recognized in this age of technology that the correct use of technology will reduce time and costs, thereby providing better services to people, especially the government. Bangladesh may not remain behind, and the government has vowed to provide public services easily and efficiently. The Government of Bangladesh has initiated e-Tendering, e-Contract management and these are part of the creation of a "Digital Bangladesh" by 2021.

1.2 Problem Statement:

In the procurement process, there are reports of extensive corruption , political influence and pressure from trade unions. The evaluation of Bangladesh by the World Bank (2002) concluded that the procurement process is not transparent and acceptable. The issues found are: i) Weak advertising. (ii) A brief time for bidding. (iii) Impoverished requirements. (iv) Non-disclosure of conditions for selection. (v) Lottery award of a contract. (vi) One-sided documents for contracts. (vii) Negotiating with all bidders. (viii) Rebidding without sufficient excuse. Procurement delays escalate prices, postpone rewards and discourage successful businesses from bidding. (ix) Corruption and outside control.

Specialized agencies have been established by many nations in order to establish Electronic procurement programs operate them. E-GP system may be used to facilitate the most rational purchase of goods and services. It is the use of electronic means to print, process, share and store all 3 of the information relating to public entity institutional purchases. In e-government growth, public e-Procurement is an essential process.

1.3 Objective of the Report:

The main aim of this report is to find out opportunities and limitations of e-GP in Public sector of this country using the operational experience gathered from Health Engineering Department.

The main objectives are:

- Studying the latest e-GP practice in Bangladesh
- To recognize e-GP issues and challenges.
- Exploring the ability of e-GP

1.4 Opportunity and Restriction of this Study:

The primary focus of this research is on e-Procurement opportunities and challenges in Bangladesh. This research has attempted to investigate how the method of e-Procurement is better off than manual tendering. This research centered on the process of e-procurement of Bangladeshi public organizations

1.5 Structure of the Report:

The structure of the study is structured as follows: the introduction, such as problem statement, justification, aims, scope and limitation, etc., is the first chapter. The second chapter is the analysis of literature. Conceptual structure and analysis methods are the third

chapter. The data analysis and results are covered by the fourth chapter. Finally, the recommendations and conclusions are found in the fifth chapter.

Chapter 2

Literature Review

2.1 Procurement

Procurement can be defined as the process of acquiring products, works or services, while ensuring any particular specifications, at the most economical total cost. The procurement process should be optimized and secured through the signing of a contract for the benefit of the authority, supplier or individuals. As part of the procurement process, quality checks are often required and suppliers are typically screened by the procuring company. Successful working relationship between the procuring entity and the supplier is maintained. Procurement includes specifying the purchasing authority's criteria, creating a list of minimum requirements and then rating any interested parties who meet the minimum requirements, typically giving the highest score based on the submitted rate and offered specification.

2.2 Public Procurement

Public procurement refers to the role of the procurement of goods, works and services by public bodies with public funds from an external agency by contractual means. Public procurement means investing the money of taxpayers to acquire the goods, works and services required by public bodies to carry out their operations. Public procurement success has a significant effect on society, relating to a group of individuals by continuous relationships involved with each other. Often, through endorsing an inadequate procurement or an inefficient business, public procurement may be misused for political benefit. The success or failure of the procurement of products, services, works by the public could result

in people having the quality of life they anticipated or impede the government from fulfilling its duties as an entity.

2.3 The Legislative, Regulatory and Institutional Structure

Bangladesh's legal and regulatory system for public procurement meets certain requirements and complies with relevant obligations. It includes legal and administrative instruments from the highest level (national laws, acts, rules, decrees, etc.) to specific regulations, procedures and formally used tendering documents. In Bangladesh, the Public Procurement Act was passed in 2006, followed by the Public Procurement Laws in 2008. These two legal documents are considered to be at the level of the world standard in the field of procurement, since these compatible standardized procurement standards cover almost all phases of tender management and contract management. This portion explores how, in practice, the procurement structure established by the legal and regulatory framework in a country functions through the institutions and management processes that are part of the overall governance of the public sector in the country. A procurement secretariat office called the CPTU (Central Procurement Technical Unit) is responsible for providing the necessary assistance to act and rule enforcement. In addition, they provide all of the Procuring Agency offices in the country with STDs (Standard Tender Documents). In order to apply the procurement function as set out in the Act and Law, all government offices have institutional set up.

2.4 Definitions of e-Procurement

E-procurement (electronic procurement, also also known as the exchange of suppliers) is the purchasing and selling of materials, work and services through business-to - business or business-to - consumer or business-to-government via the Internet, as well as other information and networking networks, such as the exchange of electronic data and preparation of enterprise resources. The value chain of e-procurement consists of indent management, e-Informing, e-

Tendering, e-Auctioning, vendor management, catalogue management, Incorporation of Purchase Order, Order Status, Ship Alert, e-invoicing, e-payment, and contract management. The workflow involved in the preparation of tenders is indent management. This part of the value chain is optional, with the indentation process determined by individual procurement departments. Administrative approval and technological penalties are received in electronic format in the procurement of works. Indent generation practice is conducted online in products procurement.

Elements of e-procurement include request for details, request for proposal, request for quotation. Standardization needs occur in addition to expanded use of e-procurement. Currently, an open extensible markup language-oriented standardized framework based on a rich heritage of electronic business experience has been established globally. It consists of five layers: communications, registry and archive, protocol for communication, core components and processes for business.

2.5 The e-GP System Development in Bangladesh

The Second Public Procurement Reform Project (PPRP II) has implemented electronic procurement and online performance tracking to face the demanding environment in public procurement practice in Bangladesh, followed by the success of PPRP I with a significant contribution from the World Bank. In four main government departments, namely RHD, LGED, BREB, and BWDB, PPRP II has been rapidly extended. The e-GP framework is a single web portal through which PAs and PEs can carry out their activities related to procurement using a dedicated secured web server. This full e-GP solution, introduced under the Public Procurement Reform (PPR) Program, is being promoted by the World Bank and is being used increasingly by all government organizations. The e-GP system shall be used by all concerned for the procurement of goods, works and services using public funds, in compliance

with the rules of the e-GP system. e-GP process has been introduced in Bangladesh according to Public Procurement Act-2006, Section-67 and Public Procurement Rule, Rule-128

2.6 Benefits of e-Procurement

Cost savings and process efficiencies have been the key impetus for businesses implementing e-procurement solutions. A study by Quesada et al . (2010) indicates that e-procurement strategies have a positive effect on the procurement processes and efficiency of the organization. The positive effect on procurement practices makes it easier for operational activities in the procurement role to evolve, leading to quality improvement. As the operational activities are carried out more efficiently, procurement is more successful.

Companies using e-procurement solutions record savings of 42 percent in the cost of buying transactions, according to Davila et al. Another study by Croom and Johnston (2003) found that the introduction of e-procurement would reduce procurement process costs by up to 75% and purchasing prices for indirect transactions by 16-18%. A significant mechanism for the realization of lower rates and discounts is compliance with existing contracts, according to Croom and Brandon-Jones (2005). The savings arising from the automation of the process stem from the removal of documentation and human interaction, the reduction of processing costs and cycle time, as well as the streamlining and automation of the audit trail and approval process (Neef, 2001, p.48).

2.7 Anti-Corruption Role of e-Procurement

Burton (2005) argues that public procurement is the key method for allowing public resources to be handled efficiently. A report by the United Nations (UN, 1999) argued that public procurement is a government business system that is concerned with the process of government procurement, such as planning project proposals, obtaining, receiving and reviewing bids,

contract awarding and payment. There are distinct stages of public procurement systems and each stage has a chance of corruption. The five phases of the procurement process are suggested by Szymanski (2007): procurement preparation and needs evaluation, product design and documentation, tendering process, award and execution of contracts, and accounting and audit. The recognition of

The risk of corruption stems from a lack of transparency, restricted access to information, and a lack of accountability and control at each point. Corruption in public procurement is prevalent across the globe and is more prevalent in developing countries. It has negative effects, including local, regional, and global, on a wide range of public levels (Ampratwum, 2008). Most significantly, it affects a country's public competence and resources, increases the cost of government operations, corrodes the social framework and government confidence, distorts the composition of government spending on various services, including education, health, operation and maintenance. Public e-Procurement is characterized as the use of information and communication technology such as Needed by the public sector and other consulting services (Davila et al., 2003; In 2004, Leipold et al.). In the public procurement process, public e-procurement can play an important role in minimizing the risk of corruption (OECD, 2008). It promotes public service accountability and honesty, such as tendering, procurement, ordering, and auctioning. Internationally, e-Procurement has been recognized as an effective instrument for the prevention of corruption and abuse of power (Sohail and Cavill, 2008). Pictet and Bollinger (2008) found out that by eliminating face-to-face contact where most demands for bribes take place, public e-Procurement helps to combat corruption.

Some of the public sector advantages of e-Procurement are as follows:

- To enhance audit and review, e-Procurement will centralize data to (In 2009, Gupta et al.).
- E-Procurement removes direct human contact with bidding and other bids.
- Work and services are substantially reduced, corruption is reduced, and internal Increase in productivity in government agencies (Ndou, 2004).
- The government can control all the works and works from an e-Procurement framework Easier and more effective services (Aman and Kasimin, 2011; Kaliannan and About Awang, 2009).
- The e-Procurement framework provides improved control and reporting of the status of Applications.
- It increases job and service accountability and increases improved engagement. Online system between suppliers and suppliers and people (Adebiyi et The. al., 2010).
- The online auction system immediately eliminates cartels, bribery and fraudulent act while purchasing.

2.8 Challenges and Risk of e-Procurement System

A study by Smart (2010) finds that the advantages of e-procurement are entirely accomplished by various implementation projects. Although the advantages of adopting e-procurement solutions can be considerable, there are some internal and external challenges and risks associated with e-procurement adoption. The researcher came to the conclusion in a study by Smart (2010) that there has been a long-term issue with recognizing benefit from IT investments and generally making a case for IT implementation. This is why businesses need

a concrete roadmap to incorporate e procurement technologies. A research by Angeles and Nath (2007) identified three major limitations to the execution of e procurement:

- Lack of problems with device integration and standardization
- The immaturity of business services focused on e-procurement and end user resistance
- Maverick purchasing and difficulty with other frameworks in incorporating e-procurement

The absence of system integration and standardization problems is due to the fact that e-procurement is still a relatively new business application and it is difficult to find benchmarking reference models. Software immaturity and the absence of such key features such as invoicing, payment reconciliation or control of various regional jurisdictions, tax systems, currencies, etc. are another obstacle. Businesses must also be mindful of the Potential hidden costs related to the implementation of e-procurement technologies, such as integration of systems, consolidation and rationalization of content, management of catalogs and search engines, enabling suppliers, end-user training and reengineering of procurement processes. These costs will easily surpass five to tenfold the cost of software licensing and maintenance (Angeles and Nath 2007).

The second problem concerns the immaturity of e-procurement service providers and the lack of readiness for vendors and the durability of end-user solutions. In certain instances, immature service providers may not be able to provide a full suite of services, especially for more complex or advanced projects implementing e-procurement. For many enterprises, the immaturity of providers and the lack of planning is also a problem. The other issue here relates to the resistance of end users to the e-procurement solution working. In order to avoid this, state companies in Angeles and Nath (2007) should promote the use of new e-procurement technologies through extensive training and end-user educational sessions.

The third challenge is connected with the difficulty among the employees of the business of modifying purchasing-related behavior. Even after the introduction of e-procurement, some businesses find it hard to remove maverick purchasing. Intensive end-user training and instructional services may avoid this. Companies also need to be mindful of the issues with other frameworks in implementing the e-procurement approach (Angleles&Nath 2007). The integration of e-procurement technologies with other business applications (e.g. accounting) can be more complicated than companies, according to Gilbert (2000),

In a study by Davila et al . (2003), four threats were identified related to the implementation of e-procurement technologies. The authors emphasize that, before these innovations are implemented, these threats need to be carefully discussed.

External risk to company

E-procurement solutions will need to be capable of cooperating with IT infrastructure providers. Suppliers must be accessible via the Internet and have catalogs to meet the needs of their customers in order for e-procurement solutions to be successful.

Risks from technology

Many businesses are unsure which e-procurement solution better fits their company's particular needs. The absence of generally agreed specifications blocks the incorporation through the supply chain of distinct eprocurement solutions. The researchers insist that the adoption of eprocurement technologies would continue to be sluggish without generally agreed coding, technological and process specification standards and will fail to produce the promised standards.

Risks from the e-procurement process

This risk refers to the protection and control of the mechanism of e-procurement itself. It may be linked to topics such as data protection and fraud prevention, such as fake vendors, fake bids, etc. These are the key risks found in the field of e-procurement implementation. Nonetheless, in order to mitigate the difficulties and threats businesses can face, this phase must be carefully prepared and implemented.

2.9 Analytical Framework:

The e-GP framework has broadened the ability to ensure the openness of information and the reach of online surveillance and monitoring, which has the potential to make the procurement system more transparent. Through the e-Procurement system, the rivalry among the bidders will be increased. The major issue for our country is tender box snatching and the e-Procurement system has the ability to solve the problem. E-Procurement can ensure that the procurement process is managed by management. IT will make it easier to send bids from home and it is possible to eliminate collusions between the bidders. Thus, in the procurement process, e-Procurement has the power to ensure good governance. The e-Procurement process has the ability to improve the efficacy of the procurement system more efficiently and easily. Automatic report generation in the e-GP framework and the availability of the requisite online tender documents make the procurement process simple and convenient. The framework for e-Procurement has the capacity to

Managing the large number of bidders and thereby optimizing the procurement process. In the e-Procurement system, costs for advertisement of the tender notice, pre-tender meeting, tender assessment report preparation, etc. should be minimized. Therefore, after the introduction of e-GP, there are substantial possible costs and time savings in the procurement process. Transparency, good governance, performance, process change, overall cost and time savings

in e-Procurement can therefore be related to the prospects / benefits of e-GP. E-Procurement has the challenges of maintaining Internet speed, Internet accessibility, energy availability, uninterrupted access to the e-GP server, etc., which can be known as technical challenges. Logistical help, officials' computer skills, e-GP contractors' preparation, etc. are also the challenges. E-Procurement challenges are also acceptability of the new method, understanding of e-GP and change of attitude in favor of e-Procurement and these will be termed as understanding challenges. The hindrance to e-Procurement implementation will be protection against hackers , malware, etc. Password protection, records, etc. can be regarded as security issues.

The factors which are influencing the advantages and limitations of e-procurement have been discussed in the below Figure-2.1 and Figure-2.2.

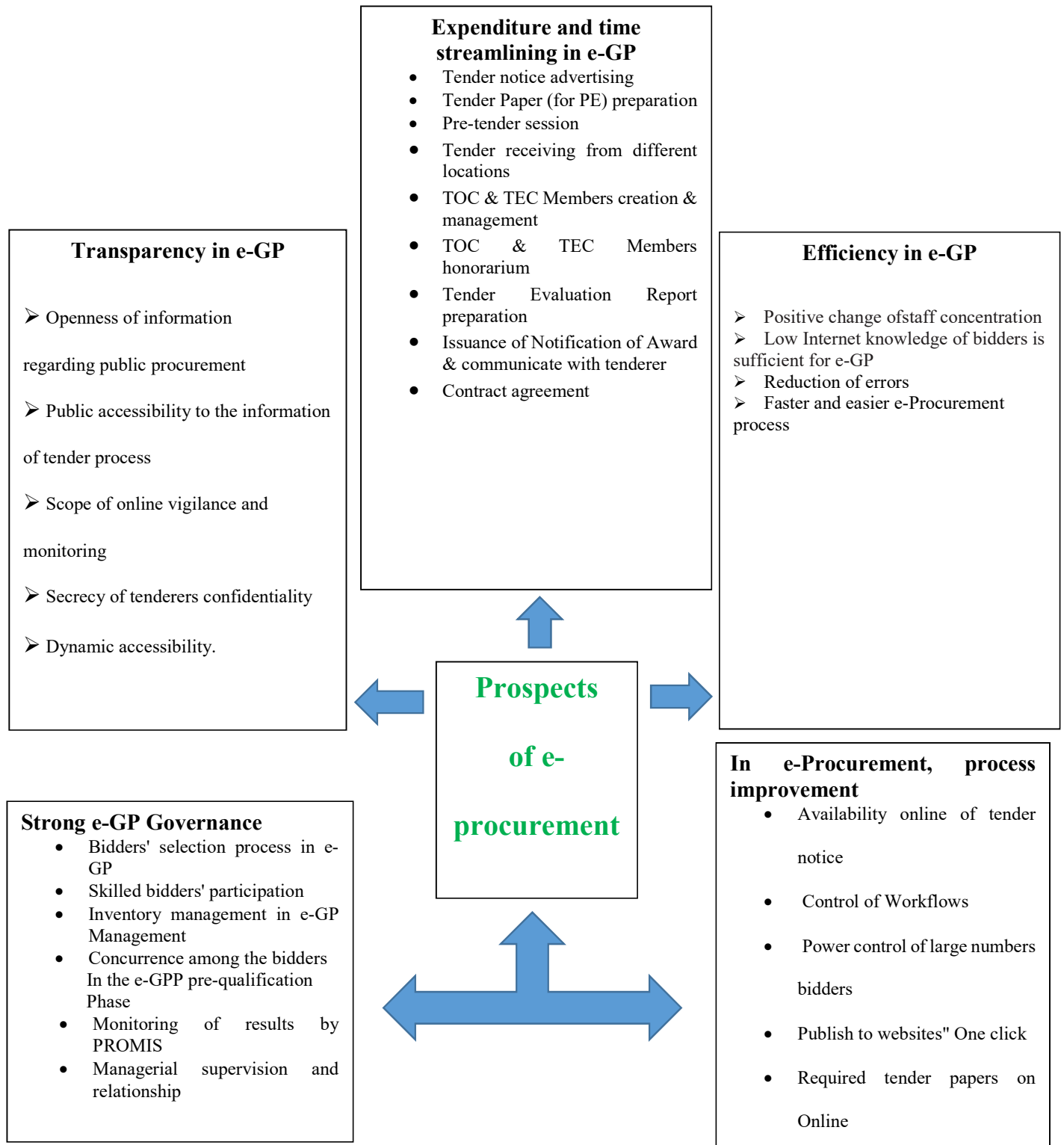


Figure-2.1: Qualitative structure for advantages of e-Procurement

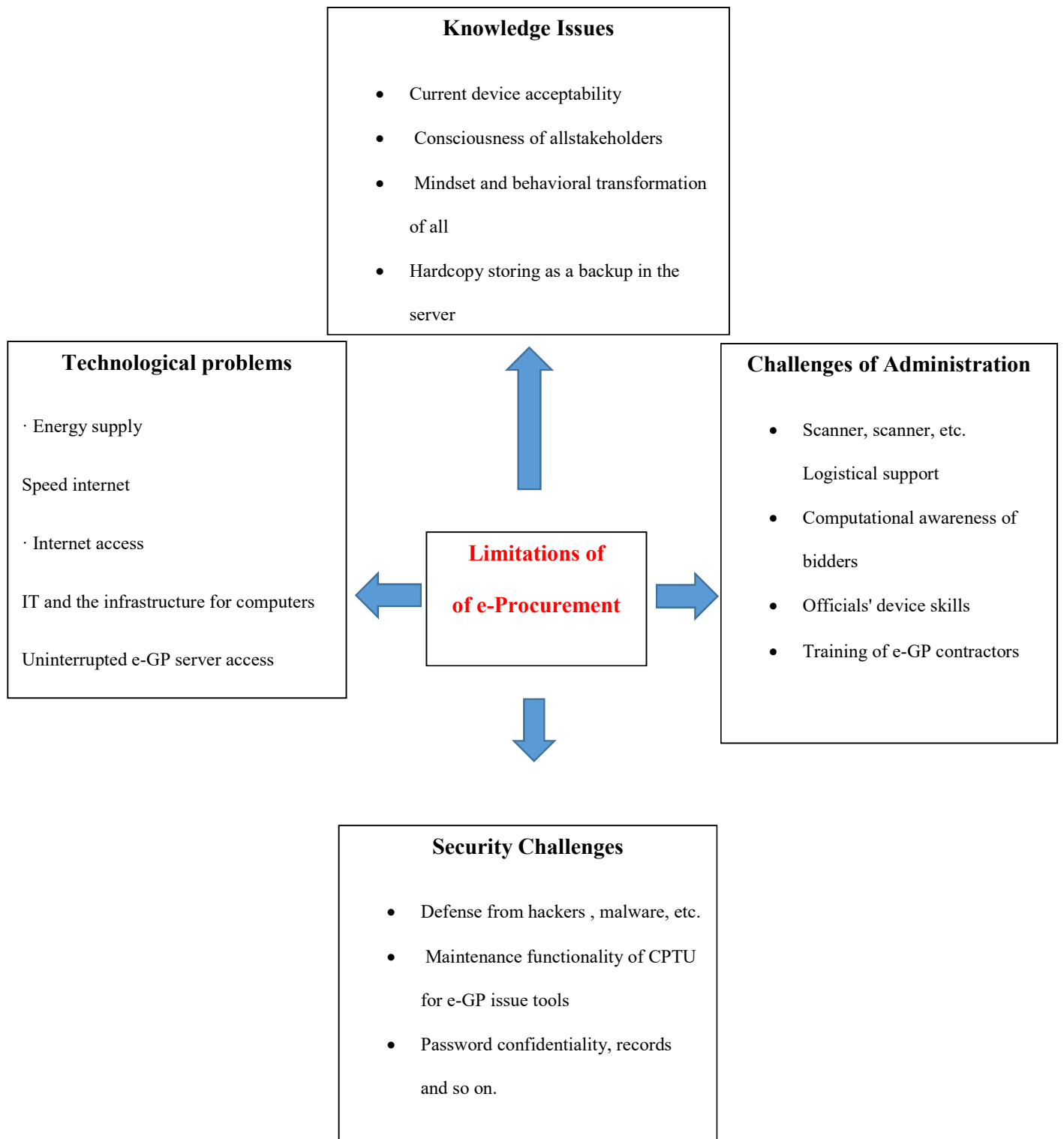


Figure-2.2: Qualitative structure for limitations of e-Procurement

Force Field Analysis for introducing e-GP in HED

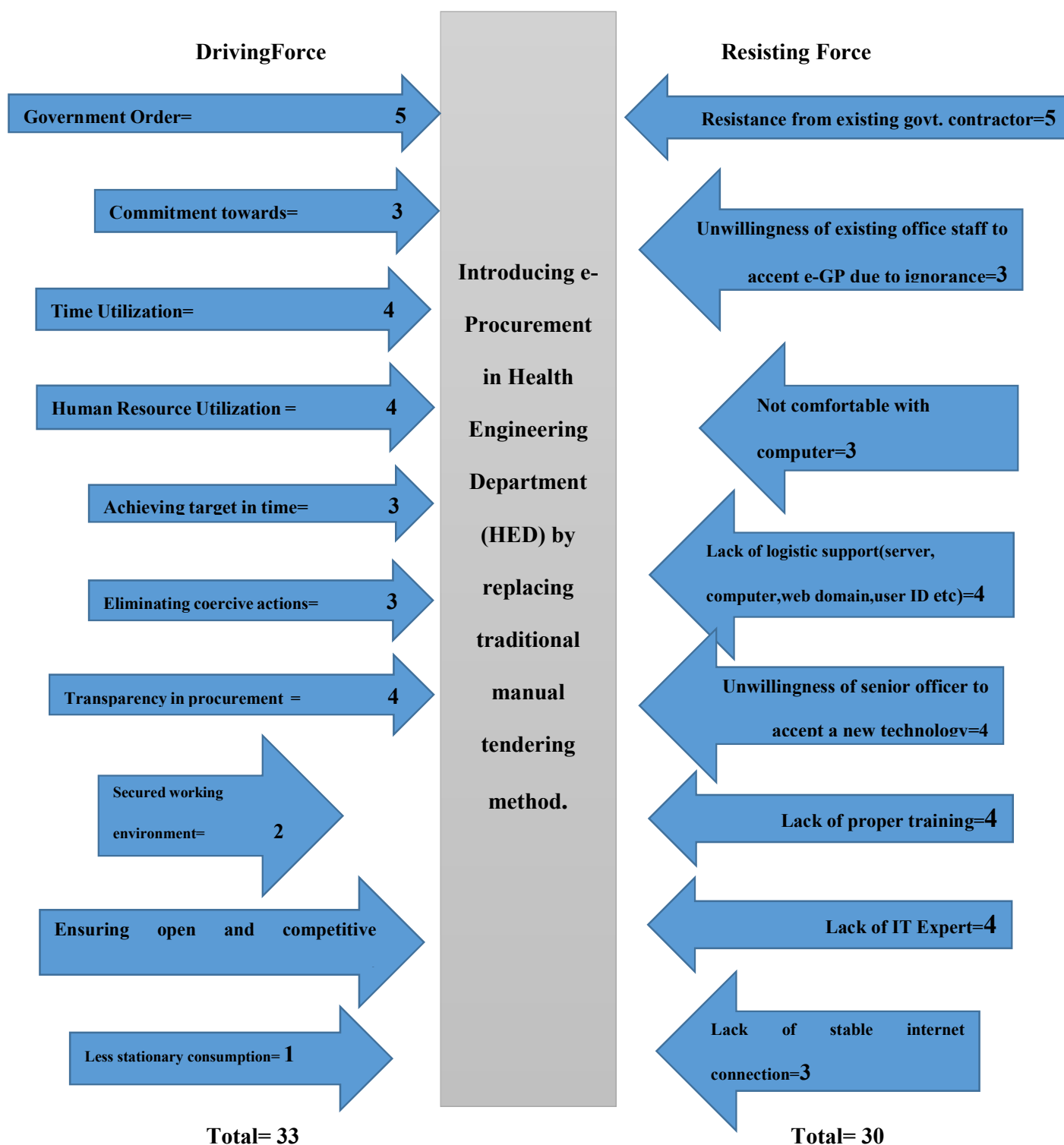


Figure-2.3: Force Field Analysis in HED

Chapter 3

Conceptual Framework

3.1 Dependent and Independent variables

3.1.1 Prospects/Benefits of e-GP

Dependent variables	Independent variables
Accountability in e-procurement	Openness of public procurement details Accessibility of the public to the tender process data Scope of vigilance and tracking online Secrecy of data regarding bidders Data on real-time access or real-time bidding
Strong e-GP Governance	Bidders' selection process in e-GPP Skilled bidders' participation Control of inventory in e-GPP Competition between the bidders In the e-GPP pre-qualifying phase Monitoring of results by PROMIS Tender box elimination snatching Disposal of excessive burden Collusion reduction among the bidders Managerial supervision and coordination

Performance in e-procurement management	Positive shift in concentration for workers For e-GPP, low Internet awareness of bidders is adequate for Reduction of mistakes Speedier and simpler method of e-Procurement Cash flow improvements compared with the manual system Low price, top quality Enhancement of the overall tendering process
Enhancement of Procedures	Online provision of Tender Notice Control of Workflows Ability Control of large numbers of bidders Publishing „ One Click “ to websites Required online tender documents Automatic generation in the e-GP framework of the required study. Precision of purchasing decisions Procurement Process Automation Framework for e-Contract Management
Agility in time and cost	Tender Notice Advertising Tender Preparation of the paper (for PE) Meeting pre-tender Tender selection from different locations Creation & Management for TOC & TEC Members Preparedness of Tender Assessment Report Sending an Authorizing Authority Tender Evaluation Study Issuance of NOA & contacting the tenderer Agreement to Contract

Table-3.1: Factors identifying advantages of e-GP

3.1.2 Limitations of e-GP

Dependent variables	Independent variables
IT related limitations	Connectivity on the Internet Infrastructure for IT and machines Electricity availability Speed to the Internet Uninterrupted e-GP server access
Operational limitations	Scanner, scanner, etc. Logistical support Software awareness of bidders Officials' device skills Contractor preparation for e-GPP contractors Officials' level of awareness about e-GP
Knowledge Issues	Current device acceptability Consciousness of all stakeholders Mindset and behavioral transformation of all Hard copy preparation as a replacement for The e-GP automatic system
Security Challenges	Defense against hackers , malware, etc. CPTU 's maintenance capabilities for e-GPP Trouble with Apps Password protection, records, etc.

Table-3.2: Factors identifying limitations of e-GP

3.2 Quantitative Structure:

For the purpose of evaluating e-GP prospects and challenges, the conceptual structure is defined as follows:

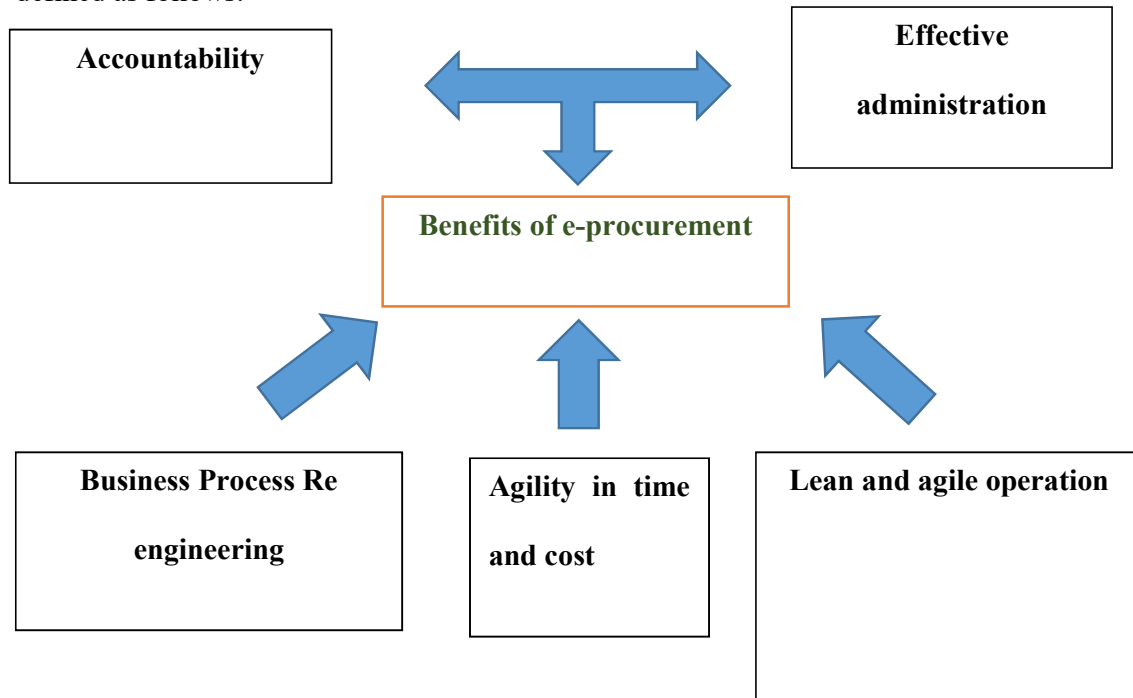


Figure-3.3: Quantitative structure for benefits of e-procurement

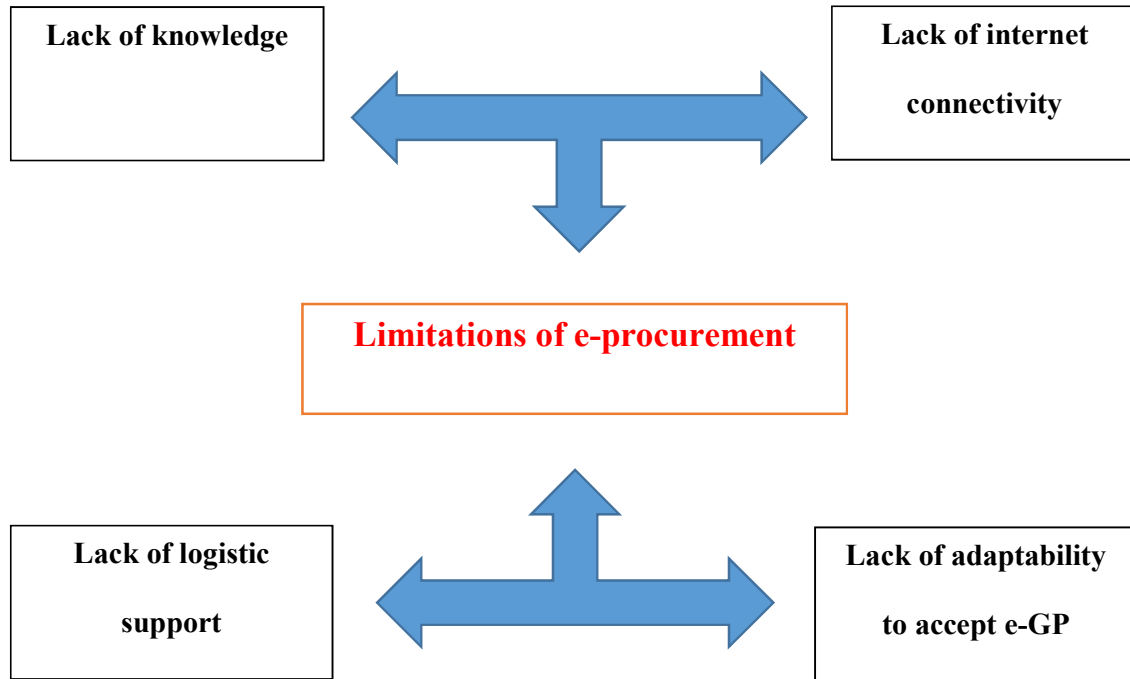


Figure-3.4: Quantitative structure for limitations of e-GP

Chapter 4

Findings

4.1 Findings Benefits of e-Procurement

- Accountability in e-GP
- Strong e-GP Governance
- Performance in e-GPP effectiveness
- Enhancement of procedures

4.2 Findings Cost and Time Savings in e-Procurement

A recent study published by Aberdeen, "E-Procurement: Trials and Triumphs," notes that E-procurement has increased cost efficiency and can streamline internal processes while strengthening supplier relationships.

The study found that companies reported a 35 percent growth in spending under control, with a 41 percent decline in maverick spending. Enterprises have also reduced their cost of requisition-to-order by 48% and halved transaction cycle time. The study showed, however, that major e-procurement problems remain in the areas of supplier enablement, catalog management and end-user adoption. "Our analysis has shown that the procurement department is no longer just an order placement transaction core, but can also be a source of competitive advantage by serving as an knowledge hub that supports business planning and decision-making."

An e-procurement solution is more than cost savings; it is now a tool that reduces repetitive manual error-prone activities and encourages compliance with business controls, allowing procurement resources to concentrate on more strategic tasks, said Aberdeen research analyst Amit Gupta.

The following efficiency advantages are illustrated by Best-in - Class businesses:

- Place 78% of spending under management control, 26% more than their peer companies,
- Show 83% of on-contract spending, with 25% less maverick spending than all other firms.
- On average, more than half of their peer firms have requisition-to-order cycle times of one to two days, with transaction costs that are 33 percent lower than all other companies.

The e-procurement benchmark report suggests that businesses start with an executive-led center-led procurement department that will leverage business partners and stakeholders' strengths and accelerate end-user adoption. Most businesses would benefit from leveraging technology solutions such as supplier networks, catalog hubs, which allow suppliers to be quickly activated, and electronically transfer purchase orders. In addition, enterprises can seek to combine e-procurement with systems payable for financing and accounts.

4.3 Limitations of e-Procurement

Challenges in Technology:

Technological problems include (1) Internet speed, (2) Internet accessibility and (3) uninterrupted access to e-GP servers.

For proper e-Procurement implementation.

Challenges in Administration:

The two factors, such as (1) preparation of contractors about e-GP and (2) bidder programming skills, are administrative challenges for adequate contracting. E-Procurement implementation. Most of the procuring companies receive logistical support, but there is inadequate logistical

support for most of the bidders. Purchasing a computer, scanner, printer, Internet connection, etc., and appointing a qualified computer operator is difficult for bidders.

Knowledge Challenges:

Current system's acceptability and knowledge of everything The daunting factors for the proper implementation of e-Procurement are the stakeholders. Security challenges: Two factors, such as (1) computer virus defense, etc. (2) The two maintenance capabilities of CPTU for the issue of e-GP software are Challenging variables for proper e-Procurement implementation.

Chapter 5

Recommendations and Conclusion

5.1 Recommendations

5.1.1 Adequate Internet Bandwidth :

Internet speed is poor all over Bangladesh, and connections everywhere are not reliable and not ongoing. RHD offices are now connected to the Internet in every building, but the service needs to be enhanced. Bidders' Internet access facilities are minimal. The normal time for submission is between 12 p.m. Towards 3 p.m. In the last minutes, and usually, bidders use tender submissions. The tender opening will also take place shortly after the tender submission date. Thus, when e-GP is enforced on a large scale, Bangladesh 's Internet infrastructure will be heavily trafficked and CPTU should increase its capacity to cope with the situation. Often, the Procuring Agency may not disrupt and obstruct access to the e-GP server and procurement process. CPTU.

In order to allow uninterrupted e-GP server access, server capacity should be increased. The country's internet access should be strengthened. As it is not possible to do it immediately, it is possible to allow bidders to request bids at night.

5.1.2 Acknowledgement of New System

Currently, HED 's 100% tender notices are available on the CPTU website. Resistance to reform by device users is likely to be sufficient and can adversely affect the effectiveness of implementing this scheme in government departments if not well handled. To improve the acceptability of the new structure, the CPTU should implement a motivational program. The CPTU should take the requisite steps to shift its attitude in favor of e-Procurement for all

stakeholders. The acceptability of a new structure often needs to be assured by political determination. HED should ensure that the issued tender notice and other documents are printed for purposes of evaluation and record keeping. In the event of device failure of the CPTU, a backup hard copy can be used.

5.1.3 e-GP expertise of HED Officials and Bidders

More training in IT should be offered to HED engineers. To increase the level of awareness of officials regarding e-GP, HED policies should be implemented. Training of bidders on e-GP needs to be ensured. It is also important to ensure the computer skills of officials through proper training. Both procuring entities and bidders should be educated by CPTU. Training for bidders will be organized locally and sponsored by CPTU and guided by Procuring Entities.

5.1.4 Anti-threat defense

The e-GP framework is accredited by SSL. So, the e-GP system should be hacker-free. The standard of security against computer viruses is less than adequate. Hackers, malware, spam and phishing are a major challenge to computerized systems operating on the Internet. The system server and the workstations at the end of users are all under attack. Proper antivirus software and only lawfully obtained software should be used to secure these risks on all workstations and servers.

5.1.5 Logistic Support

Help should be provided to bidders for the purchase of a computer, scanner, printer, Internet Liaison etc. Such aid will allow them to send tenders from their home. Tender applications from home would ensure the confidentiality of the bidder. The logistics Support for the field divisions of the HED should be improved in order to ensure adequate support.

5.1.6 Tenderer's Database

In order for the Procuring Agency to review bidder records in the e-GP online system for post-qualification, there should be a central database for bidder experience certificates, audit report, turnover record, etc. This will save time and ensure the bidder's qualification is correct.

5.1.7 Returning Tender Security

During the focus group debate, the bidders argued that they were paying higher fees valued by the Procuring Body. In order not to run the risk of decreasing bidder participation, different fees from bidders need to be held at a fair amount. Proper steps should be taken to return as soon as possible the bank draft to the bidders.

5.1.8 Execution of e-Contract Management System

The e-GP scheme has an e-Contract Management facility, but the Procuring Company continues to use the manual contract. The cost and time savings for contract management are also smaller than other procurement measures due to manual contracting. The method of e-Contract Management should be applied as soon as possible.

5.1.9 Introducing of e-procurement in all Public Sectors

As 77.35 percent total cost savings and 49.46 percent total time savings are enabled by the e-GP system compared to manual tender, government can implement e-GP system as soon as possible in all sectors. In order to increase their benefit and contribute to making Digital Bangladesh, private sectors should also implement e-GP systems.

5.1.10 Capacity buildup of e-GP System

CPTU is in charge of e-GP system maintenance. It is important to take CPTU Initiative to build up qualified manpower from various organizations to sustain the e-GP system. Maintenance power would improve the security of the e-GP framework. Procuring agencies should be conscious of the e-GP system's maintenance capability.

5.2 Conclusion

The e-GP has the ability to improve accountability, effectiveness, competitiveness and compliance with the sensitive functions of high-value government procurement. For most HED jurisdictions, it provides both an opportunity to overhaul procurement and to improve the way procurement is conducted. The e-Government Procurement Portal / System will contain all historical details relevant to the tender award. This ensures that all the information they need, along with an auditable trail of the award decision, can be found by auditors in one location. The clear advantages of an e-Government procurement system / portal can hopefully be seen now by someone who has dealt with the reams of paper that can be involved in the conventional procurement process and has read this text. The procurement process can be greatly enhanced by electronic tender document assessment systems. Cost and time savings can be assured for proper implementation of e-GP; thus, speeding up the process, reducing the resource burden and thereby realizing economies of scale. Despite the potential advantage, the integration of the e-GP system has several obstacles to face. To face the challenges and enjoy the e-GP advantage, proper planning is required. In order to resolve these challenges and make the procurement process quicker, more effective and transparent, awareness is also needed. There is no question that e-Government procurement solutions will boost the procurement process and dramatically reduce the amount of time taken. This can lead to an increase in the number of tenders made at any one time and to an improvement in the overall process control.

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