



**A Step towards Paperless National Board of  
Revenue, Bangladesh: An Empirical Study**

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## **Dedications**

This paper is dedicated to my beloved children, who have been slightly deprived in terms of love and care of their mother during my study.

## Declaration

I hereby declare that the dissertation entitled "*A Step towards Paperless National Board of Revenue, Bangladesh: An Empirical Study*" submitted to South Asian Institute of Policy and Governance Program (SIPG) at North South University, Dhaka, Bangladesh for the Degree of Master in Public Policy and Governance, is a record of an original work done by me under the guidance of **Prof. Sk. Tawfique M. Haque, PhD, Director, SIPG and Chairman, PSS Department, North South University, Dhaka, Bangladesh.** I have not copied any part of it from other sources without acknowledgement and I have not submitted the findings of the research to any other university or institute for any degree or diploma.

**Signature with Date**

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## Abstract

E-filing of income tax return can be seen as an important means to enhance the value of services to the citizen. It can be a vehicle for achieving the goal of vision 2021 that is, 'digitization of Bangladesh'. The study attempts to assess the present status of E-filing, efforts made in implementing E-filing system and explore issues, factors, challenges and opportunities associated with it. A combination of three models which include '*Policy Content and Context in Implementation*' by Merilee S. Grindle (1980), Winter's '*Integrated Model of Implementation* (2003)' and '*Technology Acceptance Model (TAM)*' suggested by Fred Davis in 1985, guide the study and provide the framework for analysis. The study considers '*Policy Content and Context in Implementation*' as the content of policy creates action programs that lie in policy design and context of implementation influences the implementation process largely. Considering the reviewed literature and theoretical discussion, five independent variables have been identified as key determinants for this study. These are: Demographic variables, Content of Policies, Context of Implementation, Perceived Usefulness, and Perceived Ease of Use etc. Under the umbrella of NBR, six (6) different taxes zones of Dhaka and Chittagong are selected as the study area based on certain rationales; such as level of E-filing, significance of the service, ease of access to the service etc. This study follows a research design relied on both quantitative and qualitative data. Mixed method approach has been applied using documentary analysis, questionnaire survey, and interview. The study uses two sets of questionnaire, one is for taxpayers who have already used E-filing system and another one is for the manual filing user. Manual filing data are collected from individual taxpayers including income tax practitioners and lawyers while the E-filing data are taken from those taxpayers who have submitted their income tax return through online. The study conducts the '*interviews*' among the policy makers who are directly involved with the issues and the field level implementers to have more in-depth understanding about the situations. The study also intends to involve some key respondents comprising of skilled IT personnel, and user of E-filing for interview. Both quantitative and qualitative data have been used for further analysis and inferences. The findings of the current research affirm the extent of implementation of E-filing with some observations and conditions.

The dynamics that are emerged from the study can provide some understandings about the nature of the independent variables which can have greater impacts on implementation and some insights on explaining the factors that creates hindrance to the successful implementation of E-filing at NBR. The findings based on the primary data indicate that explanatory variables of the study can explain most of the variations of the level of implementation of E-filing at NBR. The findings seem to be healthy when a significant correlation is found among the indicators of perceived

ease of use and satisfaction of the taxpayer about E-filing. In contrast, the implementation of E-filing may not be successful due to upholding some challenges. *Lacking of awareness among taxpayers, lacking of promotional activities, lacking of tax payment facility along with resource constraint* are determined as the major obstacle in implementing E-filing.

From the interview data, it appears that the mere introduction of E-filing is not adequate to have positive impact on job performance, the nature and the level of maturity of E-filing are also very important to have significant impacts on productivity. Proper implementation strategies like making the system compulsory to a specific group of taxpayers primarily, ample publicity, disseminate IT knowledge about E-filing through training, workshop among the users including service providers may enhance the implementation.

The implementation of E-filing will be successful when it can provide a compulsory service delivery channel through the electronic platform. In addition, certain types of corruption like petty corruption done by the field level implementers can be reduced through the proper implementation of e-filing.

Ultimately, the success of any technology based government service like E-filing program lies in how efficiently it can enhance people's participation in government functioning through ease of use. It appears that just the introduction of E-filing is not sufficient to achieve the goal of introducing E-filing at NBR but to implement the system successfully can provide greater impacts on entire governance. Surely, it is good start but the government should emphasize on its implementation strategy for enhancing direct tax collection. As revenue is known as the blood for development so this type of initiatives can accelerate the growth of revenue that can lead to the country to be a developed nation.

**Key words:** E-filing, Digitization, Implementing E-filing system, Ease of Use, Implementation Strategies, Context of Implementation, Job Performance, etc.

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## List of Abbreviations and Acronyms

ACT	Assistant Commissioner of Taxes
ADB	Asian Development Bank
BCS	Bangladesh Civil Service
CT	Commissioner of Taxes
DCT	Deputy Commissioner of Taxes
FPT	Financing and Promoting Technology
FBCCI	Federation of Bangladesh Chambers of Commerce and Industry
GP	Grameen Phone
G2G	Government to Government
G2B	Government to Business
G2C	Government to Citizen
GDP	Gross Domestic Product
IT	Information Technology
IJCT	Inspecting Joint Commissioner of Taxes
ICT	Information and Communication Technology
IFC	International Finance Corporation
IMF	International Monetary Fund
IRAS	Inland Revenue Authority of Singapore
IRD	Internal Resource Division
ITR	Income Tax Return
ITP	Income Tax Practitioners
KAFCO	Karnaphuli Fertilizer Company Limited
LTU	Large Taxpayers Unit
MCCI	Metropolitan Chamber of Commerce & Industry
MoF	Ministry of Finance
NBR	National Board of Revenue
NID	National Identification Number
PD	Project Director
PSS	political Science and Sociology
SD	Standard Deviation
SEM	Standard Error of Mean
SPSS	Statistical Package for the Social Sciences
SRO	Statutory Regulatory Order
TAM	Technology Acceptance Model
TDS	Tax Deducted at Source
TIN	Taxpayers' Identification Number
VAT	Value Added TAX
WB	World Bank
2D	Two Dimensional

# CHAPTER ONE

## INTRODUCTION

### 1.0 Introduction

In the era of third industrial revolution, technologies are using in all fields of the world. Bangladesh, as a developing country, is committed to increasing tax revenues and achieving fiscal discipline with a view to increasing self-reliance. For making Digital Bangladesh Vision 2021 a reality the National Board of Revenue (NBR), Bangladesh has initiated some administrative and policy reforms in the taxation system. E-filing or electronic filing of Income Tax Return via online is one of them. 'E-filing' or electronic filing is a process through which Income Tax Return can be submitted via online. It is considered as one of the most significant reforms of National Board of Revenue (NBR), Bangladesh in recent times through which taxes department can accelerate its journey towards a paperless office. Now the online return filing system is in the implementation stage. This system can expedite the tax payer's benefit as well as the government. But it has some challenges. The present study is an effort to examine the level of implementation of E-filing (Income Tax Return filing) at different territorial taxes zones under National Board of Revenue, Bangladesh. There are many researches in the field of policy implementation but the uniqueness of this study is that it focuses on implementation of E-services where there are very limited studies. As a former street level implementer for five years, I can address few points particularly with regard to the challenges of implementation of E-filing of Income Tax Return of Bangladesh.

### 1.1 Backgrounds

The national Board of Revenue hereinafter referred to as NBR is the apex authority for tax administration of Bangladesh was established under the president's order No. 76 of 1972. The main responsibility of NBR is to collect tax revenues. It collects taxes with three types of tax wings namely, Customs wing, VAT wing and Income Tax wing. There are two more wings named IT wing and Research and Statistics wing under NBR. Income Tax is the direct tax and other two are indirect taxes.

The Income Tax Department is governed by the National Board of Revenue under the Internal Resource Division (IRD) of the Ministry of Finance, Government of Bangladesh. There are thirty one (31) different territorial taxes zones and 649 taxes circle offices all over the country under this department. These circle offices are responsible for assessing, imposing and collecting direct taxes from the taxpayers.

After the liberation of Bangladesh in 1971, the country inherited the British Indian tax structure as a part of Indian sub continent. Up to 1984, Bangladesh followed the British Indian Income Tax Act 1922 to govern the income tax department (Fair Tax Monitor, 2015). In 1984, Bangladesh introduced 'Income Tax Ordinance, 1984 (XXXVI of 1984)' in place of 'Income Tax Act-1922' which came into activation on the 1st July, 1984.

At present, 'income tax'<sup>1</sup> the largest source of direct taxes, is governed by the Income Tax Ordinance, 1984 and Income Tax Rules, 1984. Apart from the main laws and rules, the below mentioned statutes are followed to assess the income of any entity<sup>2</sup> (Kumar, 2009).

- S.R.O. (Statutory Regulatory Orders) or Gazette Notification;
- Income Tax Circulars;
- General or Special Order;
- Explanation/Clarification/Office Memorandum;
- Verdicts of Appellate Tribunal for equivalent fact;
- Verdicts of the High Court Division on question of law; and
- Verdicts of the Appellate Division on judgment of the High Court Division.

The government imposes income tax on financial income generated by all entities within their jurisdiction in an income year. This is the key source of funds that the government uses to finance its activities and serve the public. The Income Tax Department which is responsible for all activities related to the taxation process

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<sup>1</sup> Income Tax refers to a tax that is directly imposed by the government on the financial income of any individual and business incurred in a year.

<sup>2</sup> Entity includes a person, a partnership, an organization, or a business that has an authorized and separate identity.



desires a system that would make the process of filing of income tax returns easier for taxpayers than manual filing process as well as reduce the time required for data entry at their end on receipt of the income tax returns. From this point of view, electronic return filing has been introduced since 2016 in Income Tax Department of Bangladesh.

## **1.2 A Brief Description of Income Tax Return and E-filing**

By law, businesses and individuals who incurred a distinct amount of income specified by law must file an income tax return every year to determine whether they owe any taxes or are eligible for a tax refund. There are about 3 million registered taxpayers in Bangladesh and about 1.5 million taxpayers file income tax return in a year (Source: National Board of Revenue, Bangladesh). There are two ways through which Income Tax Returns can be submitted to the respective authority in Bangladesh.

**1. Manual Filing:** This is the traditional process of return filing where a paper based return have to prepare and submit to the particular circle office physically. In this system all related documents have to be attached along with the return.

**2. E-filing:** This is the paperless system through which one can submit his or her income tax return from anywhere in any time via internet. It can be defined as the process of submitting tax returns over the Internet, using tax preparation software that has been pre-approved by the relevant tax authority, usually without the need to submit any paper documents is known as E-filing of Income Tax Return (Rahul, 2015).

To create a friendly environment for the taxpayers in calculating and submitting tax returns this system is developed. In order to run the software smoothly the income tax department has started an independent portal for E-filing of Income Tax Returns. The web address of the portal is [www.etaxnbr.gov.bd](http://www.etaxnbr.gov.bd). Through this portal one can conveniently submit income tax return from anywhere at any time.

Customized return forms have been derived by the Income Tax Authority which is available on the website. All the tax circle offices are well equipped with required

system software. Officers and staffs have been trained on online filing system to manage their tasks in efficient way. Then E-filing facility was introduced by the Income Tax Department for the first time during assessment year 2016-17. Now it is continuing along with traditional paper based manual filing system.

### **1.2.1 Significance of E-filing**

E-government services are becoming more prevalent in countries around the globe. Electronic tax filing is an important e-government application that has become increasingly ordinary throughout the world. As the use of e-filing of tax returns has spread from developed to developing countries, it has been clear that this kind of reform has some positive aspects in reducing errors and corruption. Also, it has been widely assumed that less time is spent in preparing tax return and taxpayer compliance costs would decrease with the use of e-filing. With a view to reducing the challenges and risks of manual filing of income tax return and to improve the efficiency in increasing the number of disposal, National Board of Revenue (NBR), Bangladesh introduced E-filing system.

#### **1.2.1.1 What factors drive the taxpayers to use e-filing?**

According to an analysis of World Bank Group, efficient procedures associated with E-filing can be the important driver which influences the taxpayer to use the system (World Bank Group). There are many reasons to believe that e-filing can reduce errors in tax returns, facilitate data analysis and capacity for 'risk-based audit' selection, and mitigate opportunities for corruption in interactions between taxpayers and tax officials. However, the following benefits for individual taxpayers can be realized through an efficient, well-designed e-filing system that avoids unnecessary duplication of effort.

1. Better accuracy: E-filing software with built-in justification can minimize errors considerably. Paper based filings can be prone to errors in calculations and deductions. Also, when any paper based form is migrated to the electronic system, there is a possibility of human error in data entry.
2. Prompt processing: E-filing ensures a prompt confirmation of filing, both at time of filing and then via email on registered email id. The acknowledgment

of Income Tax Return (ITR) with a certificate is generated quickly than paper based offline returns.

3. Convenience: In general, there are no time and place constraint in filing returns through online. That means E-filing facility is available 24/7 and one can file anytime and from anywhere at his/her convenience.
4. Time savvy: Of course, taking all the efforts to visit the tax office, standing in queues can be nullified by filing income tax returns through online. There is no need to visit the tax office for a minor query or an update.
5. Reduce Corruption: Nobody have to face any unexpected situation related to petty corruption in the tax offices.
6. Cost savvy: There is a good chance of doing mistakes in filing income tax return manually that is why the help of an Income Tax Practitioner (ITP) is needed. To appoint an expert is costly. Auto calculation by easy software of E-filing can save this cost. Moreover, the websites of NBR provide all the necessary orders and circulars for filing an error free return.
7. Confidentiality: Better security than paper based manual filing system since data is not accessible to anyone either by design or by chance. Only the authorized official can access to taxpayer's information. In contrary, in case of manual filings details of incomes and expenditures can fall in the wrong hands at the chartered accountant's office or in the Income Tax Department's office.
8. Accessibility to past data: As all documents are placed in one place, so one can easily access to past data in case of urgency. Such as, acknowledgments or income tax clearance certificates for bank loan, income and asset statements, etc. The server saves all data and by logging into own account on the website, one can access to them and take a print out if needed. These data also help for filing subsequent returns.
9. Ease of use: E-filing is very friendly because the detailed instructions are provided by the system so that individuals who are not very familiar with the information technology can also use easily.

10. Electronic payment facility: The system is convenient for direct debit of tax payments via sonali bank debit card. Payable taxes can be deposited through valid challan also.

#### **1.2.1.2 What factors influence the Implementers to use E-filing?**

It is assumed that E-filing services in the tax offices carry more benefit for the taxpayer than the service provider. But the E-filing can bring the following constructive assistances to the implementers. These are:

1. Increasing disposal: Checking and processing of returns are not required in this automatic system, thus number of disposal is higher than manual system.
2. Time savvy: More than forty types of different registers are maintained in manual system but in case of online system most of them are created automatically. So, reporting to authority is quicker than manual system. No need to issue any tax clearance certificate or acknowledgement slips to taxpayer. Moreover, a file can be found out with a single click through the system. As these various types of works are done by system so it obviously saves time.
3. Quick reporting: It is assumed that lot of regular types of report can be formulated by a single click within a short time though online system.
4. Unbiased Audit selection: Selection of erroneous return is a difficult and time consuming work in the tax offices. If this hectic work is done by system then it will be unbiased and a great relief to officials.
5. More attention to tax avoidance: As some clerical work can be done by the system, the officer can give more attention to tax evasion and other intelligence work.
6. More return submission: Since it is a world accepted hassle free and user friendly system it is expected that more taxpayer will submit income tax return than manual system.
7. Finally it is expected that an automated system can boost up the job performance through escalating the efficiency level of the officials.

**Table 1: Scenario of E-Return in Bangladesh**

Assessment Year	Number of total return filed	No of E-Return Filed
2016-2017	15,56,162	393
2017-2018	14,78,434 (up to Nov 2017)	40,750

**Source:** National Board of Revenue, Bangladesh.

The above trend reflects that the tax payers of Bangladesh are moving towards electronic era. But the rate of switching from paper based return to E-Return is very low.

Most of the developed countries ensure 100% online return filing. India started E-filing in the Assessment year 2007-08 and now 100% ITR are filed through online and online submission is mandatory to all (Rahul, 2015).

### **1.3 Statement of Problem**

In Bangladesh '*E-filing*' (*Online Income Tax Return Filing*) is in the stage of implementation. The broad area of the study is about Policy Implementation. This study tries to examine the level of implementation of online income tax return filing with regard to achieving the goal of Vision 2021 of the government of Bangladesh.

Bangladesh, in the past, has experienced both success and failure of implementation of policies to meet policy goals. The study intends to find out the critical factors that are acting as obstacles in the process of implementation of the 'E-filing' at field level i.e. at different territorial taxes zones.

It is found that in the first year of implementation only 393 returns were submitted through online and in the second year the number of online submitted returns was 40,750 out of total number of return 14, 78,434. The rate of moving online submission of return from paper based return is very low.

The main objective of enactment of 'E-filing' is to ensure people's accessibility to e-services. With a view to reducing the challenges and risks of offline return filing and

to improve the efficiency in increasing the number of disposal, National Board of Revenue (NBR) Bangladesh introduced E-filing system. But due to some restrictions the system is going slowly to achieve its goal fully. The study aims to find the major challenges of implementation by answering the leading research question: **‘To what extent the implementation of 'e-Filing' led to achievement of the objectives of the online return filing system? The study also looks into the other questions.** Such as, *what are the main impediments faced by the taxpayers while submitting Income Tax Return (ITR) through online? What are the key factors that creating challenges in increasing the total number of online return?*

As mentioned earlier that, in the past there have been a number of policy reforms which were successful and also many of them were unsuccessful. The main reasons behind successes or failures of these reforms were the implementation factors.

Implementation is perhaps the most important phase of policy cycle. No matter how carefully the policy is formulated, the success of a policy depends largely on how the policy is implemented (Winter, 2003).

As it is already at the implementation stage, it encourages the researcher to take up the study. This study tries to find out the factors that can affect on the successful implementation of E-filing. Another encouraging thing for the researcher is the fact that there is no significant study on implementation of E-filing. Available literatures on taxation in Bangladesh seem to be mainly limited to newspapers, budget speeches, and forums such as talk shows, campaign manifestos and policy statements. The consulted literature indicates that studies on administrative reform so far do not focus on implementation of E-return filing. This study is an attempt to bring insights to tax reform implementation in Bangladesh.

The study uses both quantitative and qualitative research methods with documentary analysis, questionnaire, and interviews to examine both the general strengths and shortfalls of the implementation of E-filing at NBR.

#### **1.4 Objectives of the study**

With a view to reducing the challenges and risks of offline return filing and to improve the efficiency in increasing the number of disposal, National Board of Revenue (NBR) Bangladesh introduced E-filing system. But due to some limitations the system is going slowly to achieve its goal fully. The key objectives of this research are:

- To examine the extent of implementation of E-filing.
- To find out the challenges of the existing system of E-filing of Income Tax Return.

#### **1.5 Research Questions**

The main research question is: **'To what extent the implementation of 'e-Filing' led to achievement of the objectives of the online return filing system?'**

The study aims to find the major challenges of implementation by raising some other research questions linking with main question. Such as:

- **What are the main impediments faced by the taxpayers while submitting Income Tax Return (ITR) through online?**
- **What are the key factors that creating challenges in increasing the total number of online Return?**

#### **1.6 Units of Analysis**

This study selects the national Board of Revenue (NBR) as unit of analysis. Under the umbrella of NBR, six (6) different taxes zones of Dhaka and Chittagong are selected as the study area. These are: Taxes zone-4, Dhaka, Taxes zone-6, Dhaka, Taxes zone-11, Dhaka, Taxes zone-13, Dhaka and Taxes Zone-4, Chittagong and Large Tax Payers Unit (LTU), Dhaka. Individual taxpayers who already used E-filing and who did not use the system, Income Tax Practitioners (ITP) as well as Tax Lawyers and service providers from these four study area are considered as respondents for this study. By analyzing some documents, it is found that highest number of income tax return has been filed through online in Taxes Zone-4, Chittagong in the last assessment year. On the other hand, along with some less educated businessmen employees of some renowned multinational companies, employees of the government and taxpayers from major posh area in the capital are assessed under the jurisdictions of

Taxes Zone-13, Dhaka Taxes Zone-4, Dhaka Taxes Zone-6, Dhaka and Taxes Zone-11, Dhaka respectively. It is also found that the taxpayers consist of highest income group entity of Bangladesh are assessed under LTU. To reach the respondents who are supposed to be more inclined to E-filing such as individual taxpayers (salaried person) of multinational companies, the taxpayers from highest income group and taxpayers resides in the posh area as well as some respondents from small businessmen simultaneously the study selects the above mentioned six taxes zones out of thirty one (31) territorial taxes zones located all over Bangladesh.

The respondents are divided into groups based on their characteristics. Then the study randomly selects respondents from each group based on its size.

### **1.7 Significance of the study**

The significance of this study is two-fold. Firstly, there are a limited number of literatures on this issue in Bangladesh since its inception in 2016. Therefore it is expected that the findings of this study may significantly contribute to the existing literature on tax reforms in general. Secondly, the findings of this research can generate questions for future studies.

### **1.8 Methodological Overview**

This research is mostly an explanatory research. The quantitative method of research has been used to conduct the study primarily. Then the study executes the qualitative method i.e. the 'interviews' to have profound understanding about the extent of implementation of E-filing. That means the research follows mixed method approach.

First of all, the researcher assembles an overall idea about the processes and ground level scenario of E-filing services in the study areas through document review analysis. The document analysis shows that some of the technologically sound taxpayers employed in renowned public and private offices are assessed under the jurisdictions of Taxes Zone-4, Dhaka, Taxes Zone-6, Dhaka, Taxes Zone-11, Dhaka, and Taxes Zone-13, Dhaka. The study selects Taxes Zone-4, Chittagong as a unit because in the last assessment year the highest number of income tax return has been filed through online in this zonal office. On the other hand, the highest income



group taxpayers are assessed under the jurisdiction of LTU and no returns are submitted through online in this location. That is why the study purposefully selects the above mentioned six taxes zones out of thirty one (31) territorial taxes zones located all over Bangladesh. The leading research question is about to measure the extent of implementation of E-filing in terms of achieving the set objectives of online filing. To address the main research question, the study follows the 'quantitative approach' based on structured questionnaire. The study uses two sets of questionnaire, one is for E-filing user and another one is designed for manual filing users. The opinion of the taxpayers who already used the system and who did not use the service including income tax practitioners has been collected through 'questionnaire'. However, such 'quantitative study' cannot explain the corresponding two questions of the research fully i.e. how the implementing factors are affecting on implementation of E-filing and what are the major impediments that creating challenges in increasing the total number of online filing. To explore the answer of these questions completely, the study follows 'qualitative approach' followed by interview. For conducting interview to the respondents, the study follows the 'interview checklist' prepared on the basis of the explanatory variables and the measuring indicators of the study. The study carries out interview in the selected study areas and at the same time in the office of the regulating body of income tax department. This combination of study locations helps to understand the actual scenario of implementation of E-filing.

### **1.8.1 Sample Size**

Respondents comprising of taxpayers including income tax practitioners and service provider from six different territorial taxes zones of Bangladesh are selected for collecting data. The study covers a total number of 80 respondents. Among them this study selects some respondents who used E-filing system and some who did not use the service. The respondents from service provider include existing member of NBR, commissioners of taxes, Additional commissioners of taxes, deputy commissioners of taxes and lower level employees. Simple random sampling method is used for selecting service provider. One key informant who is very skilled in information

technology is also selected for interview. For quantitative study the respondents from different taxes zones can be categorized as shown in the table below.

**Table 2: Respondent Distributions for Quantitative Research (Questionnaire)**

Study Location	Categories of Respondents	Number of Respondents
<b>Taxes Zone-4, Dhaka</b>	Taxpayers (Online User)	6
	Individual Taxpayers (Manual filing User)	4
	Income Tax Practitioners/lawyers (Manual filing User)	2
<b>Taxes Zone-6, Dhaka</b>	Taxpayers (Online User)	6
	Individual Taxpayers (Manual filing User)	4
	Income Tax Practitioners/lawyers (Manual filing User)	2
<b>Taxes Zone-11, Dhaka</b>	Taxpayers (Online User)	6
	Individual Taxpayers (Manual filing User)	4
	Income Tax Practitioners/lawyers (Manual filing User)	2
<b>Taxes Zone-13, Dhaka</b>	Taxpayers (Online User)	6
	Individual Taxpayers (Manual filing User)	4
	Income Tax Practitioners/lawyers (Manual filing User)	2
<b>Taxes Zone-4, Chittagong</b>	Taxpayers (Online User)	6
	Individual Taxpayers (Manual filing User)	4
	Income Tax Practitioners/lawyers (Manual filing User)	2
<b>Large Tax Payers Unit (LTU)</b>	Taxpayers (Online User)	0
	Individual Taxpayers (Manual filing User)	6
	Income Tax Practitioners/lawyers (Manual filing User)	4
<b>Total Number of Respondents for Quantitative Survey: 70</b>		

**Source:** Researcher's Synthesis

\* Details breakdowns of the sample respondents are given in Appendix 2

For collecting qualitative data, the study mainly follows the 'interview method'. Respondents from different study location for qualitative study can be categorized as shown in the table below.

**Table 3: Respondent Distribution for Qualitative Research (Interview Checklist)**

Respondents group	Type of Respondents	Sample size
1.	Key informants (Skilled IT Personnel involved with E-filing)	1
2.	Existing Member of NBR	1
3.	Commissioner of Taxes from Study Locations	1
4.	First Secretary, Tax Policy, NBR	1
5.	Additional Commissioner of Taxes from Study Locations (Supervising authority)	1
6.	Deputy/Assistant Commissioners of Taxes from Study Locations	5
<b>Total number of Respondents for Qualitative Interview: 10</b>		

### 1.9 Theoretical Framework of the Study

A combination of three models which include '*Policy Content and Context in Implementation*' by Merilee S. Grindle (1980), Winter's '*Integrated Model of Implementation (2003)*' and '*Technology Acceptance Model (TAM)*' suggested by Fred Davis in 1985, guide the study and provide the framework for analysis. The study considers '*Policy Content and Context in Implementation*' as the content of policy creates action programs that lie in policy design and context of implementation influences the implementation process largely. On the other hand, feedbacks of the target group have an effect on implementation process that may direct to modification of policy objectives. In addition, the ease of use and perceived usefulness of any technology can heavily affect on implementation of any technology based policy. Considering the above issues, the study decides to formulate the analytical framework based on these three models of implementation. The details of theories and models are discussed in the next chapter.

### **1.10 Limitations of the Study**

As the duration of the study was short, it did not allow in depth study. In terms of construct validity this study also suffers from appropriate sample size which limits validity to a great extent. Only six offices are selected out of thirty one territorial taxes zones for conducting the research. Another limitation of the present study is the lack of available literature on taxation in Bangladesh. Furthermore, there are many papers on E-filing issues in developed country context but few of them concentrate on implementation issues.

### **1.11 Organization of the Study**

This research paper is organized with six chapters:

- First chapter includes the introduction, backgrounds and brief description of income tax department of Bangladesh and E-filing of return, the problem statement, objectives of the study and research questions, and significance of the study and a brief introduction to the theoretical framework and methodological overview of the study.
- Second chapter covers literature review and the theoretical discussion of the study in relation to Policy Content and Context in Implementation by Merilee S. Grindle (1980), Winter's Integrated Model of Implementation (2003) and Technology Acceptance Model (TAM) suggested by Fred Davis in 1985, which guide the study and provide the framework for analysis. This chapter also provides the operational definitions of the variables.
- Third chapter discusses the details of the research methodology. It includes the relevance of the choice of methodology, units of analysis, details about sample size, why particular respondents are chosen, data collection methods for quantitative and qualitative study, analytic strategy used to analyze the collected data, the validity and reliability of the study, and limitations and ethical considerations of the research, etc.
- Fourth chapter comprises an overview of digitization of income tax department and the factors affecting implementation of E-filing. The efforts of NBR in implementing E-filing in terms of rules and regulations have been

discussed here. The discussion about the institutional arrangements in the context of digitization of NBR is also covered in this chapter.

- Fifth chapter includes the presentation of data analyzed and findings from taxpayers in relation to the analytical framework of the study and findings from actors involved in the implementation process at NBR; the roles of implementers in effective implementation of E-filing are also analyzed. Both types of data have been analyzed through graphs, tables, charts, etc.
- Sixth chapter covers the presentation of key empirical findings of the research by the research questions, the theoretical implication of the major findings of the study, key findings of this study, the key variables found to be appropriate in this study, indentified research gap found to be covered by this study, generalization of findings according to the context of Bangladesh and finally the conclusion.

## **CHAPTER TWO**

### **LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

#### **2.0 Introduction**

"Social science theory is a comprehensive and rational assumption regarding the answer to a research question, together with a statement concerning why the proposed answer is acceptable" (King, Keohane, & Verba, 1994, p. 19). Theory can produce the hypotheses of a study and these hypotheses are tested through empirical evidences. This chapter of the present study concentrates to find out the theoretical answers of the research questions and tries to understand the challenges and opportunities that lie in the existing online return filing system in Bangladesh. Before analyzing the theoretical arguments, this chapter advances with a brief literature review based on the previous studies describing the probable challenges and opportunities of E-filing on taxation around the world of technology. Then, the study focuses on the discussions of the reasons associated with theoretical underpinnings elaborately. From the discussed theoretical arguments, the study derives the variables that outline the analytical framework. Last of all, the chapter concludes with the operational definition of the variables of the study.

#### **2.1 Literature Review: A Search for Factors Affecting Implementation of E-filing**

E-governance and E-filing is a comparatively new issue in the bureaucratic arena. There are very few research works, articles and publications on this very issue of E-filing of tax return on public administration of Bangladesh. As discussed earlier that the introduction of E-filing at NBR is a very new phenomena so lacking of literature is usual. But some research works have been done in the South Asian countries and also in the developed countries. All these works have touched the issue of implementation of E-filing and E-governance but their context are different. However, some of the previous literatures from different context have been focused on the concept, overview, evolution and adoption of E-filing. So, the literature review helps to address the research gap and handle this study.

According to an exploratory study (Jen-Ruei Fu, 2006) done in Taiwan, the effects of the different factors like ease of use, subjective norms, and self efficacy on behavioral intention are different for manual and electronic tax filers. These factors can extend the knowledge of taxpayers' decision making and lead to better planning and implementation of e-government services.

Fu et.al in 2002 reveals that the taxpayers who submitted their returns manually are less educated, less experienced in internet using, having less IT resources in comparison with the taxpayers who filed their return via online. Finally, the study finds the fact that the taxpayers who used the electronic system once, intended to continue using the method. It seems that "taxpayers tend to concentrate on the usefulness of a tax filing method and may be fairly pragmatic in developing general attitudes towards using it, and the compatibility of a tax filing method with taxpayers' practice is a crucial antecedent to their behavioral intention" (Jen-Ruei Fu, 2006, pp. 119,121). The agency needs to incorporate the useful and valuable functions into the e-Tax software for the practices of targeted taxpayers and also to demonstrate the value of e-Tax to taxpayers (Jen-Ruei Fu, 2006, p. 121). The implementation of E-filing of Income Tax Return in Bangladesh also depends on various factors like awareness of taxpayers about information technology, self motivation etc.

A study (Rahul, 2015) conducted in India finds that the main challenge of E-filing is risk of security. Security includes confidentiality of data received through E-Return and Integrity of data maintained in proper manner so that no one can alter data received through E-return (Rahul, 2015). So importance should be given to security of private data of customers, so that more and more people electronically file their returns. For this purpose, some awareness drives should be arranged by tax department through social media to motivate people to file their returns electronically. The issue of security and confidentiality should be an important concern of tax authority in Bangladesh. The present study also tries to find out the other socio economic factors those have a vital role in the implementation process of E-filing in Bangladesh.

Hwang (1999) through a comparative study shows that the user satisfaction is influenced by taxpayers filing experience. The study also reveals that among the three filing method: manual filing method, 2D and internet filing method, the manual filing method has the lowest rate of user satisfaction. The findings of the study suggest that when new technologies are being introduced, multiple methods of tax filing should be offered to satisfy the needs of different taxpayer's profiles. This study also shows that internet filing is helpful to non experienced tax filers, who often find themselves in an increasingly complicated world of tax filing calculations and procedures. As taxpayers are increasing very rapidly, the numbers of inexpert taxpayers are very high in Bangladesh, so E-filing through tax calculating software can achieve popularity quickly. Hwang (1999) identifies only the user satisfaction about different filing method but the present research also finds the challenges of the existing E-filing system of Bangladesh.

A study (Shih-wu Liang & Hsi-pang, 2012) done in Taiwan shows that there are some individual factors and some environmental factors that have significant influence on adoption of E-filing. With regard to individual factors, self-efficacy has a noteworthy correlation with the perceived attributes of relative advantage, compatibility, and complexity. At the same time this relative advantage, compatibility, and complexity are significantly correlated with taxpayers' intention to use the online tax filing system. As a result self-efficacy indirectly affects adoption intention by influencing relative advantage, complexity, and compatibility. But the social norms have direct correlation with taxpayers' intention to use the online tax filing system. The researcher found that the environmental factors of trial ability and observability have also a significant influence on the intention of late adopters to use the online tax filing system.

The study also says that if a system has connection with more databases that can partially relieve taxpayers from the tedious work of managing numerous and complex expenditure receipts, preventing information gaps or omissions in the tax filing process. These developments would enhance the overall efficiency of the



system and reduce the time of the taxpayers that is spent in preparing and submitting income tax return. This study also indicates that government promotion, and positive appraisals of the online tax filing system from experts and the mass media, could have a significant effect on potential adopters (Shih-wu Liang & Hsi-pang, 2012, p. 439). The paper covers so many things but the research has been done based on online survey and most of the respondent have higher level of computer efficacy. In case of Bangladeshi taxpayers, the rate of computer literacy is not in the satisfactory level.

A research conducted in Malaysia (Abdul Aziz & Md. Idris, 2014) interestingly finds that the design characteristic of any system should be treated as mediating instead of moderating construct. Design has a very important and essential role in any technology introduced. The researchers also depict that design is the first factor taken care in creating any form of technology applications in Malaysia. In another way it can be said that initiation of any form of technology application or system, design characteristics of that system should not be ignored (Abdul Aziz & Md. Idris, 2014, p. 456). The resistant perhaps is due to lack of supporting, convenience and helpful designs. In case of Bangladesh same kind of resistant can prevent the authorities in achieving the goal of vision 2021 and country's public sector information and communication technology (ICT) strategic plan.

Tan et al. (2005) claim that restoring public trust in E-filing can be one of the e-government initiatives taken by the government (cited in Ling, 2008: p. 338). Ling (2008) finds that in respect of the type of incentives that can motivate to use the e-filing system, 'speedy tax refund' to be the most desirable incentive. In the same study it is also revealed that 'extension of tax filing deadline' for those who used e-file would motivate the take up of e-filing. Lucky draw prizes can also be used as an incentive as Inland Revenue Authority of Singapore (IRAS) used lucky draw prizes to encourage individuals to take up e-filing in the early years of implementation (Ling, 2008, p. 338). The findings to some extent indicate that if an individual needs to go the tax offices in order to file a return via online successfully will be impractical and it will outweigh the benefits of e-filing. The study also finds that majority of the e-filers used e-filing for the sake of convenience; speed of filing and in faith to get faster tax

refund. In the context of a developing country, speedy tax refund can be the greatest motivation in filing return through online in Bangladesh. The current study also tries to find out that how does 'rebate' can be used as incentive in case of implementation of E-filing at NBR.

According to an exploratory analysis (Kim Lean, Zailani, & Yudi, 2009) in the e-government system of Malaysia shows that trust, perceived usefulness, perceived relative advantage and perceived image, respectively, has a direct positive significant relationship towards intention to use e-government service (p. 458). The study also shows that perceived complexity has a significant negative relationship towards intention to use e-government service while perceived strength of online privacy and perceived strength of non-repudiation have a positive impact on a citizen's trust to use e-government service (Kim Lean, Zailani, & Yudi, 2009, p. 458).

"Political support at the highest level" has been identified as the most important factor for successful implementation of e-governance by Indian's Administrative Reforms Committee (Yadav, 2009, p. 686).

Azmi and Bee (2010) analyses that in the 4th year of implementation nearly 1.25 million Malaysian taxpayers has filed their returns electronically and also shows that ease of use of the electronic filing system could possibly reduce the perceived risk factor (Azmi & Bee, 2010, p. 19).

Carter et.al in 2011 through an investigation on the US e-File Initiative proposed a model of e-file diffusion that combine acceptance factors and personal factors to assess the impact of adoption, trust and optimism on e-file utilization. The findings indicate that performance expectancy, social influence, computer anxiety, optimism bias and trust on the government, etc. have a significant impact on intention to use an electronic tax filing system (Carter, Schaupp, & McBride, 2011). In point of fact, the implementation success is greatly dependent on the intention of using the system.

A study (Chen, Jubilado, Capistra, & Yen, 2015) conducted in the context of developing countries reveals that the government of Philippine has adopted a gradual implementation strategy for the implementation of online tax processing system. First of all, they made it mandatory for insurance companies, stock brokers and for top 10,000 corporate taxpayers in the country. To date, the government has not moved to expand this (Carter, Shaupp, Hobbs, & Campbell, 2011) obligation to all taxpayers in the country, rather they simply encourage non-mandated taxpayers to enroll and use the system. However, the study shows that taxpayers feel hesitate as it is uncertain whether the system can meet their expectations regarding costs, time, and effort. The results also show that in the context of online tax filing, trust in technology, trust in government, and prior experience directly affects the trust in e-government websites. Regardless if they were mandated or not, they still have considerable prior experience with the online system. In addition, relevant information provided by the system, automatic computation of taxes and the presence of proper documentation of pervious transactions positively affect the perceived usefulness.

The study (Carter, Shaupp, Hobbs, & Campbell, 2011) conducted a survey to 304 US taxpayers to capture their perceptions of e-filing. The survey results show that three factors like performance expectancy, effort expectancy, and social influence play a significant role in predicting taxpayers' e-filing intentions. More importantly, the research findings indicate that along with these three factors some personal factors like web-specific self-efficacy (WSSE) and perceived security control have a significant impact on taxpayers' e-file intentions. The findings also show that inexperienced taxpayers expect that ease of use should be a characteristic of e-filing system. An increase in taxpayer education can have a significant impact on taxpayer self-efficacy and result in increased self-confidence and e-service use. The findings in this research support the importance of identifying and understanding the influence of parents, spouses, bosses, co-workers, friends, etc. in individual taxpayers' adoption of E-filing. More importantly, taxpayer's belief on security issue is a major concern regarding online tax preparation. In Bangladesh, these factors may have the same influence, but other factors like implementation strategies and responsiveness

of bureaucrats may have a huge degree of involvement in adoption of E-filing. This study finds out some factors which are very much relevant to present study. Moreover the current study tries to uncover some other resistance issues in the context of Bangladesh.

This study (Teo, Srivastava, & Jiang, 2008) were conducted to measure the relationship between trust and satisfaction in E-Government web sites of Singapore in 2008. It reveals that trust in government, but not trust in technology, is positively related to trust in e-government web sites. The study also finds that the success of E-government web sites depends on the trust of the user on the government. The way of building trust among the user can directly enhance the intention of the user of using an e-government web site. Conversely, if the government fails to establish the user's trust and belief towards its web site, then it may not be able to encourage people to go with the technology in the future. Moreover, the users may have doubt on the information that is provided by the web site. This study also finds that users may be satisfied as long as they believe that the services provided by the web sites meet their needs well. In case of online tax return filing, a user may be satisfied as long as the transaction is completed successfully. The user's belief in the tax filing system may not necessarily affect his or her satisfaction, because the later is more affected by the service quality perceptions on the web site provided by the government. Most importantly, this paper deals with the trust and satisfaction on e-governance but the present study attempts to examine the extent of implementation measured through the level of satisfaction of the user that can be varied depending upon some contextual issues of E-filing.

According to a survey conducted in United States of America in 2008 (Schaupp, Carter, & Hobbs, 2010) performance expectancy, social influence, and perceived risk have a significant influence on intention to use of e-governance while reputation and perceived security control has influence on perceived risk. Performance expectancy was shown to be a significant predictor of usage. Social influence is also a significant predictor of intention to use in this study. This finding provides evidence that indeed referent others' opinions influence users feelings about filing their taxes via an IRS endorsed E-file system. Both reputation and perceived security control reduce risk

perceptions. Citizens who believe in the integrity and ability of the government view e-file as less risky than those who do not believe in the competence or ability of the government. In turn, lower levels of perceived risk increase intention to use an e-filing system. Tax filing is an important civic obligation. E-filing errors and missed deadlines could result in serious penalties, including fines. Citizens who believe electronic filing increases their susceptibility to these risks are less likely to use the Internet to file their taxes.

**Table 4: Different Study Findings on E-filing Implementation**

Author(s)	Study context and Key Findings
Carter, Shaupp, Hobbs, & Campbell (2011)	A survey has been conducted to 304 US taxpayers to capture their perceptions of e-filing. The study results show that three factors like performance expectancy, effort expectancy, and social influence play a significant role in predicting taxpayers' e-filing intentions.
Shih-wu Liang & Hsi-pang (2012)	A study done in Taiwan shows that there are some individual factors and some environmental factors that have significant influence on adoption of E-filing. With regard to individual factors, self-efficacy has a noteworthy correlation with the perceived attributes of relative advantage, compatibility, and complexity.
Jen-Ruei Fu et.al (2006)	An exploratory study carried out on the taxation system in Taiwan reveals that the taxpayers who submitted their returns manually are less educated, less experienced in internet using, having less IT resources in comparison with the taxpayers who filed their return via online.
Rahul (2015)	Through a study of e-filing of income tax return in India the researcher found that the main challenge of E-filing is risk of security. Security includes confidentiality of data received through E-Return and Integrity of data maintained in proper manner so that no one can alter data received via E-return.
Abdul Aziz et.al (2014)	The researchers depict that design is the first factor taken care in creating any form of technology applications in Malaysia. In another way it can be said that in initiating any form of technology application or system, design characteristics of that system should not be ignored. The resistant perhaps is taking place due to lack of supporting, convenience and helpful designs.
Tan et al. (2005)	The researchers claim that restoring public trust in E-filing can be one of the e-government initiatives taken by the government of Singapore. This study also reveals that 'speedy tax refund' and 'extension of tax filing deadline' as incentives can motivate the taxpayer to use the e-filing system.

Kim Lean et.al (2009)	According to an exploratory analysis in the e-government in Malaysia shows that trust, perceived usefulness, perceived relative advantage and perceived image, respectively has a direct positive significant relationship towards intention to use e-government service. The study also shows that perceived complexity has a significant negative relationship towards intention to use e-government service.
Azmi and Bee (2010)	The researchers analyze that in the 4th year of implementation nearly 1.25 million Malaysian taxpayers has filed their returns electronically and also shows that ease of use of the electronic filing system could possibly reduce the perceived risk factor.
Chen et.al (2015)	In the context of developing countries the study reveals that the government of Philippine has adopted a gradual implementation of the online tax processing system. The study also shows that taxpayers feel hesitate since it is uncertain whether the system can meet their expectations regarding costs, time, and effort. The results also show that in the context of online tax filing, trust in technology, trust in government, and prior experience directly affects the trust in e-government websites.
Teo, Srivastava, & Jiang (2008)	This study was conducted to measure the relationship between trust and satisfaction in E-Government web sites of Singapore in 2008. It reveals that trust in government, but not trust in technology is positively related to trust in e-government Web sites. The findings suggest that building user trust is necessary for e-government Web site success.

**Source:** Researchers' Synthesis

### 2.1.1 Literature Gap of the Study

There are very limited researches in E-filing of income tax return in the context of Bangladesh. Moreover, awareness among taxpayers has not focused in the previous literatures. The present study intends to find out whether is there any resistance from staff level officials and from beneficiaries of E-filing including mediator group. The present study also tries to find out the probable effect of E-filing on job performance and productivity of the officials.

## 2.2 Theoretical Arguments

### 2.2.1 Concept of Policy Implementation

Public Policy is the decisions, measures, programmes, strategies, and courses of action adopted by the government or the legislature (Knill & Tosun, Public Policy: A New Introduction, 2012, p. 4). Many people observe that formation of public policy

and implementation of it is the same, but formation of a policy is the beginning of it. It is the implementation that determines the main goal of the policy. In this regard, policy implementation constitutes may be the most important stage of the whole public policy process, if a policy is “insufficiently implemented, it is possible that the ultimate result will be less desirable than the previous state” (Ibid, p. 148).

The policy implementation research is relatively new in the research area of political science. It begins from 1970s but due to its extensive importance it creates a center of attention among the researchers. Policy implementation has been studied considering the cultural, organizational, political, administrative, governance, information and technological, democratic and other dimensions that actually enrich implementation research. The implementation scholars studied and identified different approaches of implementation taking into account various contexts and contents; policy design and instruments; actors and activities; and implementation processes.

Implementation is not simply putting policy into practice, but is a dynamic, interactive and complex process in which various political, administrative, and other environmental factors played crucial role in its success (Grindle and Thomas, 1991; Hill and Hupe, 2002; May, 2003; Howlett and Ramesh, 2003 cited in Winter, 2012a). Implementation can be defined as a process, as an intention, as an output, as an outcomes, as an administration, as a policy management, as an evolution, as a learning, as a structure, as a perspectives, as a political symbolism, as a coalition, as a responsibility and trust, as a pragmatization, as a design (instrument choice), and so on (Elmore,1978; Balch, 1980; Hog wood and Gunn, 1984; Sabatier, 1986; Lane, 1987; Thomas and Grindle, 1990; Hill and Hupe, 2002; and Howlett and Ramesh, 2003 cited in Winter, 2012a).

### **2.2.2 Approaches to Policy Implementation**

The present study is concerned with implementation of E-filing in Bangladesh. There are two schools of thought about implementation: *Top-Down and Bottom-Up*. The *top down* analysis framework developed by Mazmanian and Sabatier (1981) is the best known and most frequently used framework. It contains seventeen (17)

variables concerning the ability of legislation, and the socio political context to construct the implementation process. According to Winter the *top-down* perspective largely restricts its attention to actors who are formally involved in the implementation of a specific program (Winter, 1990, p. 28). The top-down researchers focus on a specific political decision, normally a law. They follow the implementation down through the system, often with special interest in higher-level decision makers. On the contrary, the *bottom-up* researchers took special interest in 'the bottom' of the implementation system, the place where the public sector meets the citizens. Street level bureaucrats are considered as key decision makers in those studies, and the disability of political leaders and administrative managers to direct field level implementers is emphasized.

Hull and Hjern (1987) focused on the role of local networks in affecting a given problem in the implementation process, and they also developed a way of identifying these networks. Starting with the actors with most direct contact with people exposed to the problem, one gradually identifies more and more actors who are interacting with the first set of actors around the problem, and so on. In this way, this type of *bottom-up* research draws the informal and empirical implementation structure about a given problem, while *top-down* study intends to look at the particular implementation strategies that are defined in the policy program.

The implementation researchers have so many controversies in case of choosing ideal research strategies, methodologies, focal study are focal subject areas, theories and concepts, evaluation standards, etc. One of the major controversies among implementation analysts has been whether implementation should be studied from the *top-down* as a control problem (Mazmanian and Sabatier, 1981 cited in Winter, 2012a) or from the bottom-up, by focusing first on actors most proximate to the problems to be solved by policies (Hull and Hjern, 1987 cited in Winter, 2012a). The scholars also disagree on the key concepts of implementation research, some of the scholars want to concentrate on the implementation *process* as the dependent variable (Lester and Goggin, 1998), while others focus on implementation behaviors/output as the dependent variable (Lipsky, 1980, cited in Winter, 2012a)



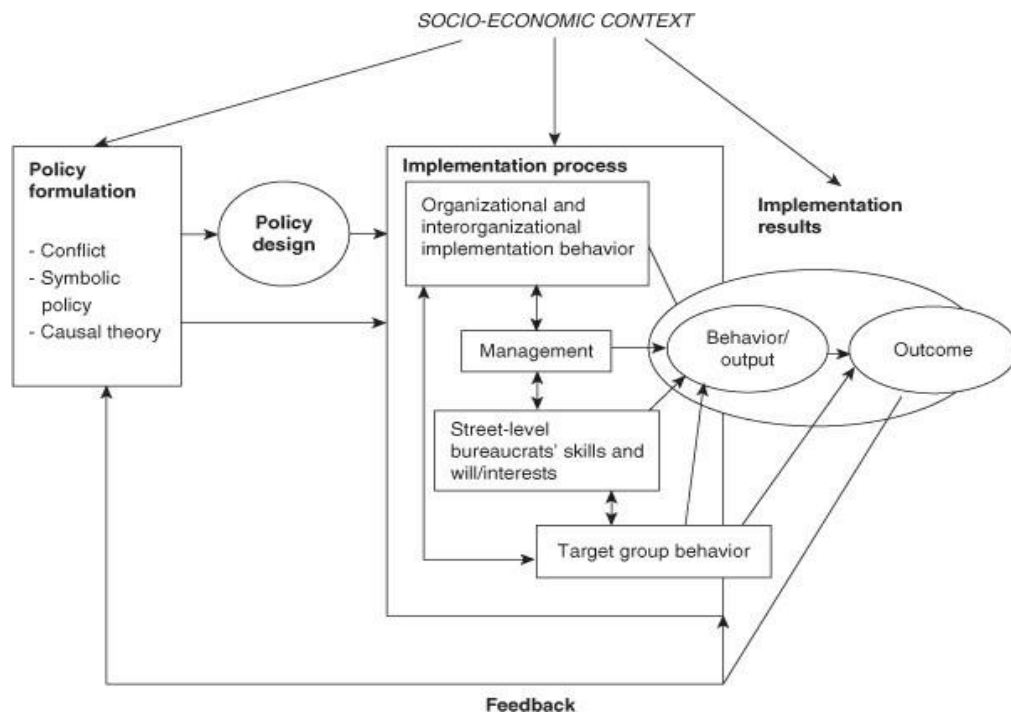
which has been explained by process and organizational variables (Mazmanian and Sabatier, 1981; Winter, 1999). Some scholars even include outcomes as dependent variables.

Considering all these controversies and criticism some synthesizes of both the perspectives has evolved.

**Synthesis of both perspectives:** Both top-down and bottom-up perspectives draw attention to the implementation process. However, there is a conflict between the two perspectives. Each tends to ignore the portion of the implementation reality explained by the other. Elmore in 1985 suggested to use both forward mapping (*top down analysis*) and backward mapping (*bottom up analysis*) for policy research as each of the approach tends to provide valuable insights for policy makers. This researcher also claims that policy designers have to consider the instruments of policy and the resources they have at the stage of implementation in case of forward mapping research and the incentive structure for the target group and the ability of street level bureaucrats to use these incentives in order to meet the problematic situation of the target group in case of backward mapping research. In 1990, Winter suggested another kind of synthesis (Winter, 1990; Winter and Nielsen, 2008) through his '*Integrated Implementation Model*'. The purpose of this integrated model was not to construct a true *synthesis* between *top-down* and *bottom up* perspectives, but to combine a number of most important theoretical elements from different implementation research into a joint model or framework.

### **2.2.3 An Integrated Implementation Model**

One attempt to synthesize and integrate some of the most important and promising variables in implementation research in a common framework of analysis has been presented by Winter (1990; Winter and Nielsen, 2008 cited in Winter, 2012) in his Integrated Implementation Model.



**Figure 1: An Integrated Implementation Model (Winter, Implementation, 2012)**

The model focuses on a set of factors that affects on policy implementation. These are: Policy formulation and the policy design, organizational and inter organizational relations, that represent different degrees of commitment and coordination, the behaviors of the street level bureaucrats, their will and capacity, the role of management on street level bureaucrats, social policies of target groups, socio economic conditions and feedback mechanisms. The conflicts in policy formulation and a policy with an ambiguous goal can lead to implementation failure. That means policy implementation is heavily affected by these factors. The implementation prospects depend on the type of resource dependency among participating organizations. The behavior, expertise, motivation and discretionary power of street level bureaucrats have the crucial role in the implementation of most policies. The commitment of the manager on the policy implementation can shape the bureaucratic behavior and attitude of the street level bureaucrats. So, the role of managers is very important.

The Integrated Implementation Model shows that target groups of public policies can play an important role through their positive and negative actions and attitudes.

And finally, the *socio-economic context* forms important framework conditions for implementation.

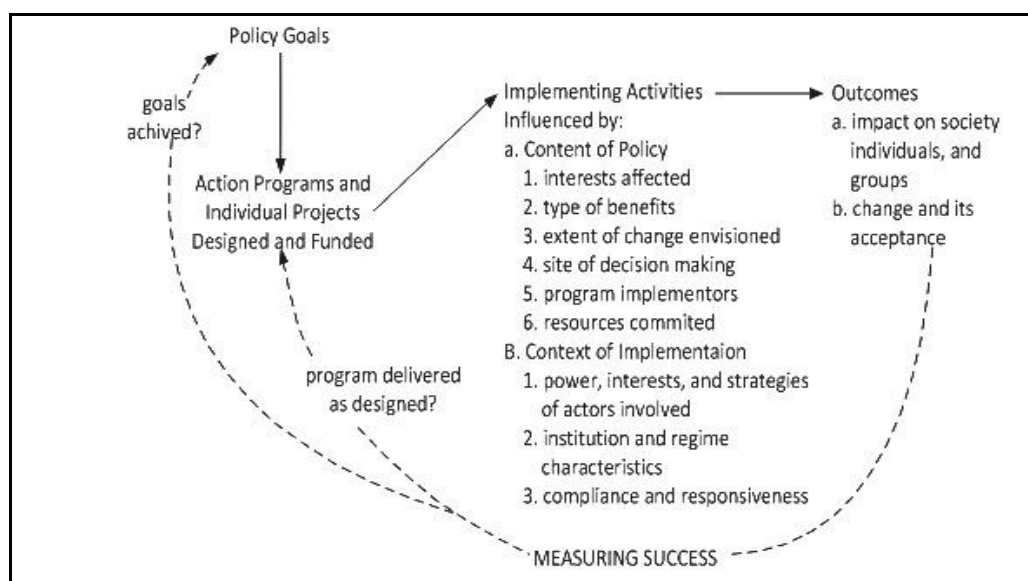
#### **2.2.4 Policy Content and Context in Implementation**

In general, the task of implementation is to establish a link that allows the goals of public policies to be realized as *Policy Content and Context in Implementation* outcomes of governmental activity (Grindle, 1980). With a view to studying of policy implementation process, the concrete action programs that lie in policy design should be investigated and analysed. That means the implementation process is largely dependent on the content. On the other hand feedback from implementation process may direct to modification of policy objectives. Merilee S. Grindle (1980) strongly argued that implementation process is greatly affected by the shape of the programs and also by context of implementation.

***Content of Policy:*** The extent of change that can be brought by the public actions or programs to social, political and economic relationships can influence the implementation process. If a considerable opposition arises from those whose interests are threatened by the program, the policy objectives will be hindered. Differences in the degree of behaviour change the program envisions for its intended beneficiaries can also affect its implementation. Executing body of the policy implementation is also determined during policy formulation. The site of decision making, capacity of implementing agencies can also influence the implementation process. Some of the implementers may have more active, expert, and dedicated personnel than others; some may have greater support of political elites; some may have greater access to resources.

***Context of Implementation:*** According to the author, the context or the environment of the administration in which the program implemented is the most important implementing factor. In large part, if any policy or policy reform results in changes that have a great impact on broad sectors of the society and are eagerly visible to the affected people, the public reaction is likely to be strong. Power capabilities of the actors, their interests and the specific strategies to achieve the goal of the policy are also very important for the purpose of analysis of the

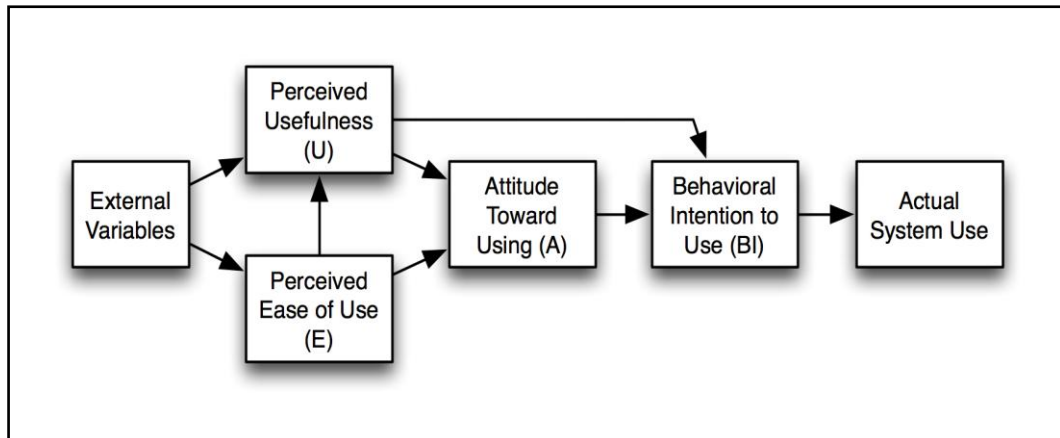
implementation of specific program. The general problem of compliance and management within the bureaucracies need to be considered as a prime issue in implementation of any change initiative. Moreover responsiveness of public officials during implementation in providing support and service are important to evaluate the program achievement. The implementers must be skilled in the art of politics as well as must understand the environment in which they seek to realize the programs. The study also suggests that if the bureaucratic system do not hold extensive amount of power at the centre, decentralization of implementation authority may not attain the objectives of the policy.



**Figure 2: Implementation as a Political and Administrative process (Grindle, 1980)**

### 2.2.5 Technology Acceptance Model

In 1985, Fred Davis suggested the technology acceptance model (TAM). The Technology Acceptance Model (TAM) intended to describe the motivational process that mediates between system characteristics and user behavior. This model suggests that when users are offered a new technology, a number of factors influence their decision why they will use it. Especially the perceived usefulness and perceived ease of use constructs have received a great deal of attention in intention to use of any technology.



**Figure 3: Technology Acceptance Model (Viswanath & Davis, 1996, p. 453)**

***a. Perceived Usefulness (PU)***

Davis, in his study of PU, proposed a six items measurement tool. The six items include the four items most commonly used: (1) Using (application) increases productivity; (2) Using (application) increases job performance; (3) Using (application) enhances effectiveness on the job; and (4) Overall (application) usefulness in job. All measures of PU are found to lead to an acceptable level of internal consistency.

***b. Perceived Ease of Use (PEOU)***

It is observed that four items are more frequently used in technology: (1) learning to operate (the application) is easy; (2) finding it easy to get the (application) to do what needs to do; (3) the (application) is rigid and inflexible to interact with; and (4) overall, finding the (application) easy to use. These are found to lead to a reasonable degree of internal consistency.

**2.3 Concept of E-government and E-filing**

The terminologies like E-government, E-filing and E-governance have come into light with the development of Information and Communication Technology (Godse and Garg, 2006, P, 13). Both of the terms have different characteristics and objectives but in many cases, they are used synonymously (Ibid, P, 13). The definitions of E-governance can be varied from the use of information and communication technology to open movement of information across the country. It can be defined as the process to overcome of physical presence of traditional paper based system to

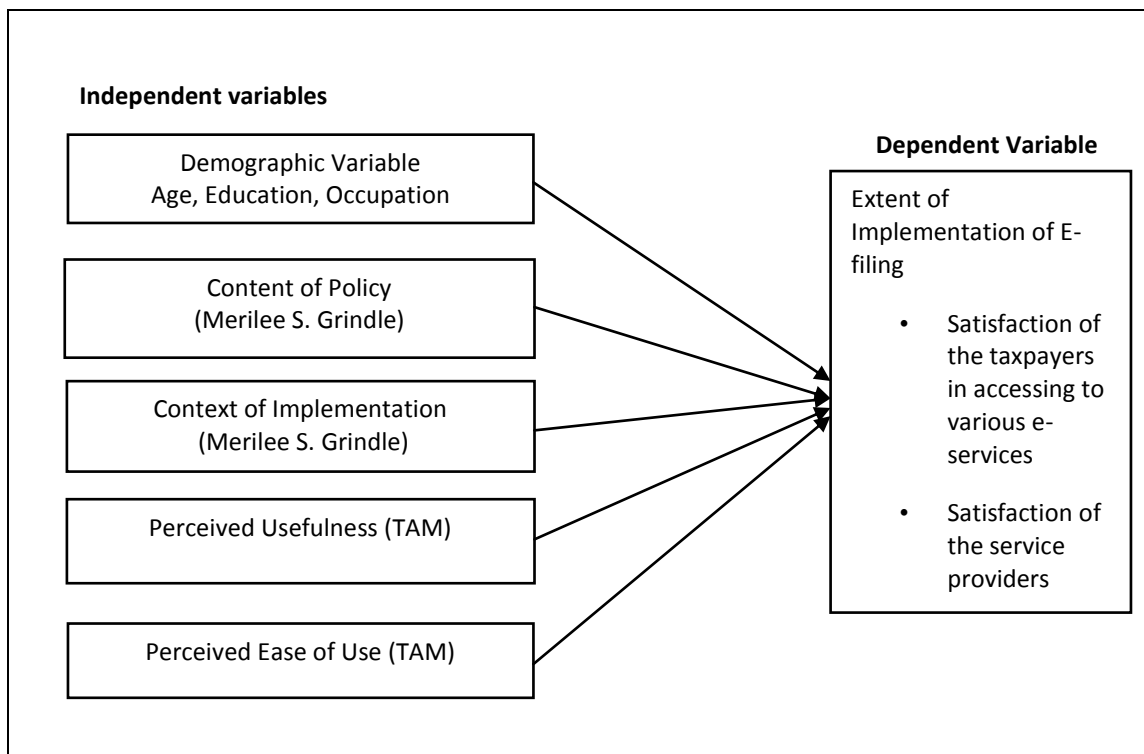
get any services of the government. It can also be defined as the use of technology in enhancing the access to various government services (Pathak et. al., 2007, P. 197). The basic grounds for introducing E-governance is to provide open access to the citizens as they can contact with the public officials and get the services through online or by using other information technologies. The introduction of ICT requires reforming operational processes of the government agencies into electronic form from paper based system linking with different databases, and improving ease of access to the public services (Singh et.al. 2010, P. 256). Another goal of introducing E-governance is to share information between government agencies i.e. to conduct government-to-government (G2G). These G2G transactions can simplify the navigation of government-to-citizen (G2C) as well as government-to-business (G2B) transactions also (Ibid, P. 256). Therefore, E-governance functions through these three components: G2G, G2B and G2C. In general, G2G is considered as *E-government* that is limited within the periphery of the public agencies only.

In the age of NPM (New Public Management) governments have shifted from a government centric approach to a citizen centric approach and through this approach, e-services are provided to citizens for 24/7 hours i.e. the services are not limited within the office hours only. According to a report of United Nations this type of e-services is the most sophisticated level of E-government scheme. This can be characterized as: horizontal connections among government agencies; vertical connections between central and local government agencies; infrastructure connections for interoperability issues; connections between governments and citizens to provide services; connections among stakeholders i.e. government, private sector, academic institutions, NGOs and civil society (UN, 2008, P. 16).

Modernization of public services through the adoption of ICT is considered as a major shift all over the world. User acceptance is defined as an “initial decision made by the individual to interact with the technology”. And it comes after “direct experience with the technology and after an individual has decided to accept the technology” (Venkatesh et al., 2004).

## 2.4 Analytical Framework of the Study

In the light of reviewed literature on implementation of E-filing, E-governance conducted in some technologically developed countries and considering the factors discussed in the theoretical part, five independent variables have been identified as key determinants for this study. They are Demographic variables, Content of Policies, Context of Implementation, Perceived Usefulness, and Perceived Ease of Use etc.



**Figure 4: An Analytical Framework of the Study**

**Source:** Researchers' synthesis

This analytical framework gives an overview of variables of the study. The casual links between these variables are also pointed out in the framework. First of all, the performance of E-filing depends on the strategies taken by the Implementing Agencies. When Taxes Zone, as an implementing agency, has that level of commitment towards E-filing will have an impact on implementation. The interest of the target population in using the system also has an effect on E-filing. The demographic variables are also connected with how or whether people understand policy objectives. The organizational commitments are strongly connected to implementation structure. The extent of change that is envisioned during system generation has an effect on implementation. The rate of implementation may

increase if E-filing is made mandatory for a specific group of taxpayer rather than making it open and optional for all. If the implementers have the will and power to involve other actors in the implementation process, higher level of cooperation from various other actors like ITP, Media and Business Community etc will be ensured. The mode of operation of the system affects implementation through easy access to the system.

**Table 5: Operationalization of the Variables of the Study**

Independent Variables	Indicators for Independent Variables	Dependent Variable	Indicators for Dependent Variable	Objectives of the Study
Demographic Variables	<ul style="list-style-type: none"> <li>• Age</li> <li>• Educational Qualifications</li> <li>• Occupation</li> </ul>	Extent of Implementation of E-filing	-Satisfaction of the taxpayers in accessing to various e-services  -Satisfaction of the service providers	-To examine the extent of implementation of E-filing.  -To find out the challenges of the existing system of E-filing of Income Tax Return.
Content of Policy	<ul style="list-style-type: none"> <li>• Strategies to Implement (Ensuring incentives like rebate, time extension, promotional activities etc.)</li> <li>• Extent of Change Envisioned</li> </ul>			
Context of Implementation	<ul style="list-style-type: none"> <li>• Competence and Support in the Bureaucracy</li> <li>• Compliance and Responsiveness of Beneficiaries</li> <li>• Resistance and Conflicts within the officials</li> </ul>			
Perceived Usefulness	<ul style="list-style-type: none"> <li>• Increasing Productivity</li> <li>• Increasing Job Performance</li> </ul>			
Perceived Ease of Use	<ul style="list-style-type: none"> <li>• Finding it easy to Operate the system</li> <li>• Finding it easy to Calculate Taxes</li> <li>• Time savvy</li> </ul>			

**Source:** Researchers' Synthesis



## **2.5 Operational Definitions of the Variables**

### **2.5.1 Dependent variable**

The dependent variable of the study is '*the extent of implementation of E-filing*' and it covers the level and pattern of implementation from both taxpayers and implementers point of view. The '*extent of implementation*' means the degree/dimensions of implementation at NBR. This variable has been measured based on the level of satisfaction among the user and the service providers about the very content of the system and the context of implementation. Satisfaction of the service provider has been assessed in terms of increasing job performance and productivity of the public officials while satisfaction of user is based on ease of use and the other implementing factors associated with it. Satisfaction of the taxpayer also includes the level of trust about E-filing system among the user.

### **2.5.2 Independent variables**

#### ***Content of Policy***

Ideally, the core components of the policy and implementation requirements of the policy are clearly stated or available within the policy or project. The degree of change that can be brought by introducing the E-filing system at the income tax department of Bangladesh necessarily is envisioned in the concerned project objectives. Differences in the extent of behaviour change, the program envisions for its intended beneficiaries can also affect its implementation. If E-filing is mandatory for a specific group of taxpayer then implementation rate may increase. Implementation strategies that are determined during policy formulation can play a vital role in implementation of any reform initiative. In case of E-filing of income tax return in Bangladesh ensuring incentives like rebate, extension of return submission deadline can have a positive effect on implementation. In addition, some promotional activities can also be taken to enhance the performance.

#### ***Context of Implementation***

The context or the environment of the administration in which the program implemented is the most important implementing factor. In large part, if any policy or policy reform results in changes that have a great impact on broad sectors of the society and are eagerly visible to the affected people, the public reaction is likely to

be strong. The competence and skill of implementers is very important to achieve the goal of E-filing system. Moreover, support and interest of the actors are also very important for the purpose of analysis of the implementation of E-filing. Accordingly responsiveness of public officials during implementation in providing support and service are important to evaluate the program achievement. The general problem of compliance and management within the bureaucracies need to be considered as a prime issue in implementation of any change initiative. In some cases resistance and conflicts may also emerge within the official that can hinder the implementation. For successful implementation of any program in any organization or government there should be sound socio economic and political conditions. The stakeholders' roles, responsibilities and attitudes towards changes can have specific impact on a program like E-filing. That is why compliance and responsiveness of intended beneficiaries including income tax practitioners are very important factor for implementation of E-filing.

### ***Perceived Usefulness***

Perceived usefulness is the degree to which a person believes that using a particular system would enhance his/her job performance. Usually automation brings incredible change all over the world. Now it is well proven that information technology noticeably can enhance the productivity of job. Especially E-filing of income tax return through using application software saves time, cost and visit (TCV) of the taxpayer as well as it increases the job performance of the service provider. If the system can enhance the effectiveness of the job, the implementer's intention to use the system will increase and finally implementation of E-filing become successful.

### ***Perceived Ease of Use***

It refers to the degree to which a person believes that using a particular system would be free of effort. If an application is perceived as easier to use than another, then it is more likely to be accepted by users. In case of E-filing through software will consider the operational simplicity of the software. If the taxpayer finds it easy to operate and to get the things what need to do, then the intention to use the system

will raise. These intentions of taxpayers ultimately lead to boost the sustainability of the system.

## **2.6 Conclusion**

This chapter highlights some E-filing related studies and their findings along with the theoretical arguments to widen the understating on the dynamics of E-filing implementation process. These literatures provide some practical result of E-taxation, E-governance adoption status from different countries. From these studies different kinds of influencing factors have been depicted in case of E-governance implementation. This chapter briefly discusses about different theories and models to develop an analytical framework, which can explain the influence of probable factors on implementation output of E-filing. The combination of Policy Content and Context in Implementation by Merilee S. Grindle (1980), Winter's Integrated Model of Implementation (2003) and Technology Acceptance Model (TAM) suggested by Fred Davis in 1985 provide the framework for analysis largely. A set of implementing factors are derived from these models that have an effect on public policy implementation output as well as outcome. On the basis of these theoretical arguments and the empirical findings from different literatures, the study develops five independent variables as well as measuring indicators for the study. These variables along with measuring indicators help to formulate the research tools and design the overall methodology of the study.

## CHAPTER THREE

### RESEARCH DESIGN AND METHODS OF INQUIRY

#### 3.0 Introduction

This chapter is an attempt to address the methodological issues based on which the research is conducted. First of all, the chapter furnishes the description of research design and then deals with the justification for selecting the study areas of the research. Subsequently the chapter sketches out the data collection methods from those study areas by describing the research instrument, research setting in terms of organization and participant, limitations of the study, and ethical consideration of this study, etc. The quantitative data are collected from two different segments of respondents: E-filing user and manual filing user, to know the context of implementation and to explore the challenges of E-filing elaborately. The details demographic profiles of the respondents for the qualitative study are briefly described here. This chapter also illustrates the analytical strategy used to find out the answer of the research questions linking with the objectives of the study. It also spreads light on the quality matters of the research approaches through the validity and the reliability tests along with the illustrations of the methodology of the study.

#### 3.1 Research Design

A **research design** is a systematic approach that a researcher uses to conduct a scientific study. It is the overall synchronization of identified research components and data resulting in a credible outcome. The design of the present research is descriptive study, one of the several ways of doing social science research, involving analysis of implementation status of E-filing and finding out the challenges of the existing system of E-filing of Income Tax Return in Bangladesh. According to Yin (2003), as a research strategy, "the case study is used in many situations to contribute to our knowledge of individual, group, organizational, social, political, and related phenomena" (p. 1). This study is an integration of qualitative and quantitative research approach that means it follows mixed method approach of research design. Written documents have been used to understand and gain insight into the content, context, and efforts of the specific online return filing initiatives. A

perception survey has been conducted to get provided numeric descriptions to the identified variables and factors. Interviews have been conducted to explore and understand the meaning, understanding, and views gained from the live experiences of the respondents. Interviews also help to use the results of this exploration to support the survey design. This process establishes a new data reference point which is used to triangulate the data and to some extent minimize potential research bias. The use of various sources and methods of data collection enable the researcher to overcome the weaknesses that are likely in using one source. A good case study uses as many sources as possible in data collection (Yin, 2003, p. 85).

### **3.2 Area of the Study**

The research areas have been selected on the basis of the research questions that prompted the data collection. According to Yin 2003, to answer the research question accurately unit of analysis should include the definition of the case, geographical area, time boundaries and the context of case or cases (pp. 22-24). In general, the study selects the study areas to get adequate information or data where the researcher either has sufficient answers to the research questions or has adequate data to test the hypotheses of the research. The present research has one leading question about the extent of implementation of E-filing of income tax return along with two corresponding questions. To examine the answer of the research questions, 'quantitative approach' has been followed based on perception survey among E-filing users and manual filing users. But, this 'quantitative approach' of the study is not able to find the extent of implementation of E-filing fully, so a 'qualitative approach' along with the 'quantitative approach' has been adopted for the study. National Board of Revenue (NBR) is the apex authority for tax administration which is responsible for carrying out the specified function of E-filing such as, policy making, monitoring and evaluation of programs, coordinating other agencies, managing human resources and so on. For this, the study selects NBR as a whole as the main unit of analysis of the study. At the same time, necessary documents are collected from controlling authority which can help to understand the extent of implementation of E-filing at NBR. According to Yin (2003) within a single case, several subunits may be attended (Yin, 2003, p. 42). All intermediary

units are also important for data collection. The present study considers six different taxes zones under NBR as the subunit and collects data from those areas by using different data collection techniques.

### 3.2.1 Selection of the Study Area for the Research

The study uses purposive sampling method<sup>3</sup> for selecting the study area. There are four (4) broad categories of respondents in this research, these are: E-filing user, manual filing user, policy makers who are strongly attached with the system and the field level implementers. The statistical figure of the reports on online return submission in the last two assessment years demonstrates that most of the taxpayers (about 95%) who submitted their return through online are service holder. In terms of the extent of the presence of E-filing, the study deliberately selects the six (6) different territorial taxes zones from Dhaka and outside Dhaka as the study area to reach the salaried taxpayers as respondents. The study selects LTU as the sixth study area seeing that under the jurisdiction of LTU the highest income group people submit their IT return but no online return is found. So, the study looks forward to get some interesting findings from this area which may help to explain the context of implementation of E-filing. On the other hand, NBR are selected as the study area to reach the policy makers of E-filing.

**Table 6: Categories of Taxpayers in the Study Area**

Category	E-filing user		Manual filing user	
	Frequency	Percent	Frequency	Percent
Public service holder	16	45.7	8	22.9
Private service holder	17	48.6	23	65.7
Business/Profession	1	2.9	2	5.7
Others	1	2.9	2	5.7
<b>Total</b>	<b>35</b>	<b>100</b>	<b>35</b>	<b>100</b>

**Source:** Researcher's Synthesis

<sup>3</sup> Purposive Sampling: In this method, the researcher purposively selects certain units to get representative sample (Aminuzzaman, 1991, p. 79)

This study intends to follow the 'natural experiment approach'<sup>4</sup> to evaluate the implementation status of E-filing at NBR. To achieve this goal, the study tries to select the cases where there are divergences of E-filing level through which the possible effects of variables can be understood. Firstly, the study considers five (5) different taxes zones of Dhaka and outside Dhaka where the maximum number of salaried taxpayers submit their income tax returns through online. Then, the document analysis helps to know that among the salaried taxpayer a small number of taxpayer are using E-filing and rest are using manual filing method for submitting their return. Then the study selects LTU as the study area because no return is submitted here via online. Since NBR is the regulatory authority, it can help to study the extent of implementation of E-filing as a study area. Considering these issues, the study selects total six taxes zones out of 31 territorial taxes zones of Bangladesh as the study area for the current research.

However, all the thirty one (31) territorial taxes zones over the country have the same level of resources and facilities in terms of infrastructure related to E-filing.

### **3.2.2 Target Respondents and Sampling**

The sample size of a research is normally determined by the best possible number that is required to enable justifiable inferences (Marshal, 1996, p. 522). The quality of the research can be affected by the improper and inadequate size of the sample (Bartlett, et al, 2001, p. 43). For the current study, due to have some limitations 'at the E-filing user level' the respondents and their numbers (N) are determined by following the principles of the '*purposive sampling*' i.e. the investigator tries to selects the relevant and representative samples as far as possible. The '*sample frame*' for the 'manual filing user level' is selected based on the '*random method*' considering their IT knowledge and involvement with the system. Then the study follows the representative sampling based on the categories of taxpayers. The study identifies the policy makers, the field level implementers and an expert on E-filing as the key informants for the study as they are directly involve with the system working in the sample organizations. The implementers selected from the different taxes

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<sup>4</sup> Natural experiment approach: In this type of approach, the cases are selected based on the assumption that within the specified area one group has received the service while the other has not.

zones based on the combination of 'purposive sampling' and 'convenience sampling'<sup>5</sup> techniques; so that the investigator can assemble opinions from the various levels of officials who are more or less involved with the entire processes of the E-filing services. For selecting the key respondent and policy level officials, the study follows 'purposive sampling' method. In this way, the study selects the 'sample officials' based on the method named 'non-probability sampling'<sup>6</sup>.

**Table 7: Target Respondents and the Sample Size for the Research**

	Type of Respondents	Sample Size	
		Within Dhaka	Outside Dhaka
<b>Quantitative</b>	Taxpayers (E-filing User)	27	8
	Taxpayers (Manual Filing User)	30	5
<b>Qualitative</b>	Key Informants (E-filing Project Personnel)	1	0
	Policy Level Officials (NBR)	3	0
	Field Level Implementers	4	2
<b>Total number of Respondents: 70 (Quantitative)+10 (Qualitative)=80</b>			

**Source:** Researcher's Synthesis

The identity of the sample respondents should be kept secret in accordance with the directives of Data Protection Official for Social Research. So, all the public officials who responded to the interview are clustered into three major groups: key informants, policy level officials and field level implementers rather than using their names and addresses, so that they cannot be easily identified. Accordingly, the working places i.e. name of the taxes zone of the field level implementers are not mentioned for the respondents from field level implementers. In case of quantitative data collection, the same principle has been maintained. The study does not require

<sup>5</sup> In convenience sampling method, the researcher chooses items as per his/her convenience (Aminuzzaman, 1991, p. 80).

<sup>6</sup> Non probability sampling relies on the subjective judgment of the researcher.



the name and designation of the respondents from whom the quantitative data are collected through questionnaires.

### 3.2.3. Socio Economic Status of the Sample Respondents

To understand the socioeconomic status of the sample respondents, the study collects data on different facet of the respondents. That is why the study considers; gender, age, educational qualification, occupation, category of the taxpayer in relation with return submission (individual taxpayer or representative of a taxpayer), longevity of filing income tax return, etc. in formulating research tools for data collection. The study finds that in terms of *gender*, the sample is biased to male gender. The documents provided by NBR shows that very limited number of the female taxpayer submit their income tax return electronically. Even if anyone had found then it was observed that she used the system with the help of another male relative, so it was very difficult to influence her to talk on this technical issue. Thus, most of the respondents at 'E-filing user level' eventually turn out as male respondents. But in case of sampling of field level implementers, the study tries to find equal number of male and female respondents. As per the availability of the female respondents, the number of female respondents at manual filing user level is also very limited. As a result, the study ends up with lesser number of female as the respondent.

**Table 8: Socio-Economic Profile of the Respondents (Gender)**

Particulars	E-filing user		Manual filing user	
	Frequency	Percent	Frequency	Percent
Gender				
<b>Male</b>	32	91.4	31	88.6
<b>Female</b>	3	8.6	4	11.4
<b>Total</b>	35	100.0	35	100.0

Table (8) shows that among the 70 respondents of quantitative study only 7 are female and rest of the respondents are from male group.

Though the age groups of the sample respondents are varied from 21-30 age groups to 51 and above but the study finds a very narrow variation of the *age* ranges among the sample respondents. At the E-filing user level, most of the respondents are from 31-50 age groups (77 percent).

**Table 9: Socio-Economic Profile of the Respondents (Age)**

Particulars	E-filing user		Manual filing user	
	Frequency	Percent	Frequency	Percent
Age				
<b>21-30</b>	3	8.6	4	11.4
<b>31-40</b>	27	77.1	18	51.4
<b>41-50</b>	3	8.6	10	28.6
<b>51 and above</b>	2	5.7	3	8.6
<b>Total</b>	35	100.0	35	100.0

The respondents of this study have at least graduation degree in terms of *educational level*. It is assumed that as the illiterate people or less educated people are not able to use the e-services or they are not eligible for paying income tax, so they are not capable to do E-filing. Therefore, the majority of the respondents of the current study have Master/higher degree (74 percent) or graduate degree (26 percent).

**Table 10: Socio-Economic Profile of the Respondents (Education)**

Particulars	E-filing user		Manual filing user	
	Frequency	Percent	Frequency	Percent
Education				
<b>Graduate</b>	9	25.7	9	25.7
<b>Master's or Higher</b>	26	74.3	26	74.3
<b>Total</b>	35	100.0	35	100.0

Rather than the level of education, the above table (10) shows a very interesting data i.e. for both levels of studies the numbers of respondents with same educational qualifications are equal.

In terms of **occupational status**, the variations among the respondents at E-filing user level are not remarkable. At this level most of the respondents belong to the ‘service holder’ category i.e. 93 percent. However, the respondents are confined only within three categories: public service holder (46 percent), private service holder (48 percent) and others (6 percent). In case of manual filing user category, the study tries to collect data from the mediator group like ITP, income tax lawyer and other professionals, so that the study can gather a different view or opinions from them. That is why; at this level the study comprises 66 percent of respondents from private service holder category that includes the ITP and lawyers, 23 percent from public service holder and rest of the respondents are from other categories.

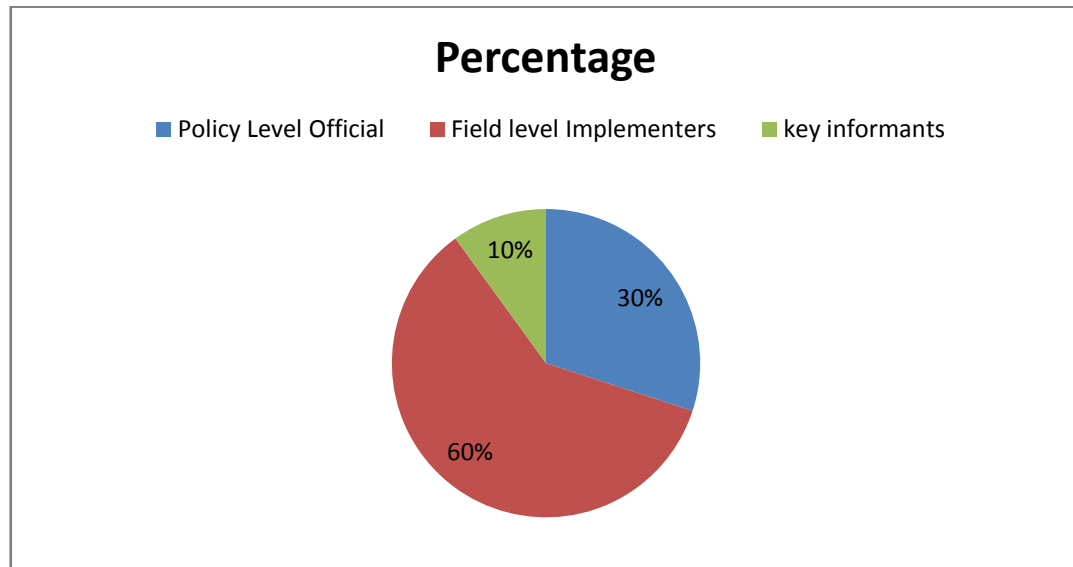
**Table 11: Socio-Economic Profile of the Respondents (Occupation)**

Particulars	E-filing user		Manual filing user	
	Frequency	Percent	Frequency	Percent
Occupation				
<i>Public service holder</i>	16	45.7	8	22.9
<i>Private service holder</i>	17	48.6	23	65.7
<i>Business/Profession</i>	1	2.9	2	5.7
<i>Others</i>	1	2.9	2	5.7
<b>Total</b>	35	100.0	35	100.0

**Source:** Researcher's Synthesis

The respondents for **qualitative study** belong to either policy level officials or field level implementers categories. The key informants come from the policy level officials who are actively attached with the system from the very beginning of E-filing at NBR. From the figure (6), it can be stated that the study covers 60 percent respondents from the field level implementers category as the study deals with

implementation status of E-filing. To examine the policy content of the system linked with implementation, the study collects data from the policy level officials (30 percent) and the rest (10 percent) are from key informants.



**Figure 5: Status of the Respondents in terms of Characteristics of the Services Provided (Qualitative)**

### 3.3 Units of Analysis

This research is designed to understand the extent of implementation of E-filing of income tax return and to find out the challenges of E-filing in Bangladesh. The study intends to realize the mechanisms of E-filing i.e. which features of E-filing are affecting its implementation. To understand the mechanisms of the system, the research selects six different taxes zones under NBR and its head office as the cases on the basis of certain rationales; such as level of E-filing, significance of the service, ease of access to the service etc. So, the main 'Unit of Analysis' of this study is NBR and the subunits are six different territorial taxes zones under NBR. Both types of data (quantitative and qualitative) are collected from the respondents attached with the selected unit and subunits of the study.

### 3.4 Research Approaches and Estimations

Research approaches are plans and the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation (Creswell, 2014, p. 3).

### 3.4.1 Data Collection Methods

The study uses a number of tools for collecting data from the sample areas of study (six different taxes zones of Dhaka and outside Dhaka and National Board of Revenue). First of all, the study applies the '*document review*' as a data collection method to gather an overall idea about the extent of implementation of e-filing and the contexts of respective study. This review helps to capture the government initiatives taken regarding this program, rules and regulations about implementation of the system and the actual legal processes of the services, etc. The study consults the following types of documents during field data collection:

**Table 12: Consulted Documents during the Field Data Collection**

Hard Copies	Soft Copies	Websites and Software
Income Tax Ordinance, 1984; Income Tax Rules, 1984; SRO's; Government Order; Official documents; Clarifications; Guidelines for online return; Leaflets; Tax chronicles; Monthly Reports etc.	User guide on E-filing, Project documents, PPT slides on E-filing Project etc.	www.etaxnbr.gov.bd; www.nbr.gov.bd; SAP Net Weaver Portal; e-payment portal; e-TIN portal etc.

**Source:** Researcher's Synthesis

The document review provides an overall idea about the procedures and the ground level scenario of the service in the sample offices. After that, the research conducts questionnaire survey and interview to gather more in-depth perceptions about the situations. For each group, separate questionnaire or interview checklist has been developed. At the E-filing user level most of the questionnaires are disseminated through e-mail to the respondents and at the manual filing user level questionnaires are conducted through self administer process. In this study, purposive sampling method (non-probability) is used to select respondents so as to gather required information. Similarly, 'snow ball sampling'<sup>7</sup> method are also used to select respondents and also tries to select respondents from different geographical area,

<sup>7</sup> **Snowball sampling** refers to the sampling method where one respondent recruits other respondent for study purpose. This sampling method is normally used where potential participants are rare.

from different income groups, and from different occupation so as to collect different views from different stakeholders. Around 100 questionnaires were delivered through e-mail to the E-filing user; out of which 36 questionnaires (43.5%) were received. Some respondents replied immediately after survey request; some were responded after first and second reminder. In case of manual filing user 80% questionnaires were filled up by following the self administered method and rests of the questionnaires were delivered electronically. The study follows the face to face interview administration method to conduct the interviews. To get meaningful data the researcher initially contacted to the respondents for interview and gave an idea about the research area and then went for data collection.

**Table 13: Different Methods of Data Collection and their Justifications**

<b>Methods</b>	<b>Justifications</b>
<b>Documents Review</b>	To realize the government initiatives regarding this program, rules and regulations about implementation of the system, the actual legal processes of the services in the sample organization and to understand the current state of E-filing.
<b>Interview</b>	To understand the status of implementation of E-filing linked with policy content and to know about the challenges of implementation.
<b>Perception Survey with Structured Questionnaire</b>	To know the general perception of the target population of both group about E-filing services (E-filing user and manual filing user).

**Source:** Researcher's Synthesis

The views of the 'taxpayers i.e. service receivers' and 'the implementers' are obtained through 'structured questionnaire' and 'interview checklist'. This method helps to gather quantitative and qualitative data in a standardized way. Since the data have been collected through mixed method approach, the study tries to analyze the data more scientifically and objectively. At the same time as this study capture the variations among the variables through the use of '*Likert Scale*' so the data have been quantified easily. Then the study analyzes those captured perception of the respondents through the statistical software (SPSS). The research also collects qualitative data to examine the relations between the variables along with

quantitative data. As a consequence, the study tries to pursue various methods of data triangulation to overcome the limitations of each method and tries to balance one method by other to get more inclusive, reliable and valid data.

### **3.5 Analytic Strategy**

This study uses different types of statistical tests using SPSS software, mathematical models, few techniques of Microsoft Excel and Word to analyze the quantitative data. To interpret the data with the objectives of the research few qualitative techniques have been used in this study (Aminuzzaman, 1991, p. 69). Simple frequency distribution, mean, descriptive statistics, simple/multiple linear regression, bivariate correlation, chi square tests, etc. are the statistical tools that have been applied to analyze data. SPSS is good at analyzing data and displaying understandable information in tables, chart, and graphs (Griffith, 2007, p. 123).

#### **3.5.1 Data Coding for SPSS and Analysis**

The surveyed data for the research has been categorized and tabulated in accordance with the variables of the study to interpret with the objectives of the study. This process has been done according to the sequential activities explained by (Miles & Huberman, 1994, p. 10): data reduction, displaying and drawing conclusion. *'Delphi method'<sup>8</sup> has been followed to reduce the 'qualitative data' which is collected through interview and open ended questionnaires.* The study also follows the *'thematic approach'<sup>9</sup>* for pinpointing the qualitative data to answer the research questions. To identify the expected themes the researcher read and re-read the data carefully (Rice & Ezzy, 1999, p. 258). This approach helps to reduce the data to certain models and those models are analyzed linking with the objectives of the study. In case of reduction of the 'quantitative data', firstly data are coded to make simpler for the entry in the SPSS software. After that the reduced data are analyzed

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<sup>8</sup>The ***Delphi method*** is a forecasting ***method*** based on the results of questionnaires sent to a panel of experts. Several rounds of questionnaires are sent out, and the anonymous responses are aggregated and shared with the group after each round. The experts are allowed to adjust their answers in subsequent rounds.

<sup>9</sup> The thematic approach emphasizes on pinpointing, examining, and recording patterns or 'themes' within data.

through IBM SPSS (Statistical Package for the Social Sciences) 21.0 and Microsoft Excel to attain descriptive and inferential statistics of the study.

First of all, the quantitative data are analyzed through frequency distribution to get the demographic features of the respondents for the study and to get the main features in terms of involvement with E-filing by calculating 'mean value'. Secondly, the quantitative data are analyzed through '*correlation-coefficient*' to observe the significance of association that exists between the explanatory variables and the dependent variables of the study. '*Multiple linear regression analysis*' has been used to know the nature and the extent of the impacts of the independent variables over the dependent variable. The study uses tables, figures, charts, graphs, etc. to present the evidences wherever applicable.

**Table 14: Different Techniques of Statistical Analyses and their Objectives**

<b>Statistical Methods</b>	<b>Objectives</b>
<b>Descriptive Statistics</b>	To explore the major features of the surveyed data by calculating 'mean value' with SEM and SD.
<b>Bivariate Correlation</b>	To measure the strength and significance of the linear relationship between explanatory variables and dependent variable of the study.
<b>Linear Regression Analysis</b>	To be acquainted with the nature and the extent of the impacts of the independent variables over the dependent variable.

**Source:** Researcher's Synthesis

### **3.5.2 Deductive Approach**

When any research starts with an analytical framework and formulates empirically testable propositions about a phenomenon, then it is called 'deductive approach' of research (Layder, 2011, p. 134). The current study has developed three research questions including one leading question to get answer through empirical findings. According to King et al, 1994 " Inference is the process of using the facts we know to learn about facts we do not know (p. 58) and 'causal inference' is the knowing about the causal effects from the observed data (Ibid, P. 8). This study follows the causal inference to understand the influence of the variables on implementation of E-filing at NBR.



### **3.6 Assessing the quality of research**

The quality of any research design is very important. According to Yin, 2003; the quality of any research design can be judged through certain logical tests which include trustworthiness, credibility, conformability, and data dependability (p. 33). To establish the quality of any empirical social research four tests are commonly used (ibid, 33). The tests are: construct validity, internal validity, external validity, and reliability.

#### **3.6.1 Construct Validity**

Yin, 2003 states that 'construct validity' is the method of establishing accurate operational measure through which the concepts are studied (p. 34) A researcher needs to cover two steps to meet the test of the construct validity: firstly, the specific types of variables that are being studied should be chosen and then the preferred measurement indicators of these variables need to be reflected by the specific types of variables that have been selected (Yin, 2003, p. 35). The dependent variable of the current research is the extent of implementation of E-filing and five independent variables have been selected for this study. Both types of variables are being operationalized through their operational definitions and the research tries to develop proper measurement indicators to test them. The extent of implementation of E-filing is measured through satisfaction of the user as well as satisfaction of service providers about the system and the study is designed to explore the factors that are affecting on successful implementation of the system. If the independent variables have any effect on implementation then most likely it works through the variations of these factors. Moreover, the study tries to use multiple sources of evidence and to establish a chain of evidence at the stage of data collection. At the stage of report composition, draft report has been reviewed by the team leader of E-filing project. These are the three tactics to increase the construct validity of any research (Yin, 2003, p. 36).

#### **3.6.2 Internal validity**

Internal validity refers to the establishing causal relationship between the variables (Yin, 2003, p. 36). The aim of this research is to explore the causal relationship between the extent of implementation of E-filing and independent variables like:

demographic variables, content of policy, context of implementation, perceived usefulness, and perceived ease of use. The study has been designed in accordance with the principle to understand the factors and conditions that can affect the dependent variable (extent of implementation of E-filing) of the study. To examine the relationship, the study applies correlation analysis and linear regression analyses that increases the internal validity of this study. But the dependent variable (implementation) may be affected by other variables rather than the selected independent variables. So, the findings of the study cannot conclusively state that the changes of the dependent variable are exclusively occurred due to the variations of the independent variable.

### **3.6.3 External validity**

External validity deals with the area to which the findings of the study can be generalized (Yin, 2003, p. 37). This validity confirms the degree to which the study results can be generalized to other conditions, participants, times, and places (Marczyk, et al. 2005, p. 67). There are two ways of drawing generalization: *statistical generalization and analytical generalization*. Survey data can draw statistical generalization whereas the analytical one can be drawn from the case studies and the experiments (Yin, 2003, p. 37). An effort has been made to draw analytical generalization by comparing empirical result with previously developed models on E-filing implementation using implementation theory and technology acceptance model.

The level of implementation of E-filing may varies based on a variety of factors like culture, economic conditions, administrative procedures etc. Accordingly, the findings of the current research done at NBR, Bangladesh may contain a lower level of external validity.

### **3.6.4 Reliability**

Reliability emphasizes that if the same research is repeated with the same procedure, such as the data collection procedures, same findings and conclusion will arrive (Yin, 2003, p. 37). Actually, the aim of reliability is to reduce the measurement error and biases of the study. The robustness of data can be varied on the basis

some issues like: the period when data are collected, people who are involved in the data collection process, and the settings from which the data were collected (Begley, 1996; cited in Hussein, 2009: 3). To get more reliable data, the study conducts the interviews of NBR officials individually followed by 'Delphi method' as the study topic is very sensitive in nature in the context of Bangladesh and they may not be willing to speak in front of others. Usually, the interview process can promote the respondents to speak but does not yield reliable information always. So, the study crosschecks the key information with the multiple sources to increase the authenticity of those data.

### **3.7 Ethical Considerations in the Research**

The directives of Data Protection Official for Research and other ethical issues in social research have been followed strictly, such as: maintaining confidentiality, personal integrity, and secrecy etc. In regard to access of E-filing data at NBR, the researcher firstly takes permission from the appropriate authority to carry out the research on this issue. The participation of the respondents in this study was voluntary and they had the liberty to refuse participation or to stop at any stage of response. The personal data like: names of the respondents, email addresses, phone or mobile numbers and sensitive information like: income or health related data are not preserved by the researcher. This study also tries to avoid any types of manipulation and follow the 'scientific honesty' for the study.

### **3.8 Challenges and Limitations for the Study**

As E-filing is a very new issue among the taxpayer so it is difficult to find the target population within the short period. Generally, human being has a tendency to resist something new. So, conducting research on the technical issue like implementation of E-filing seems problematic and thus to have valid and reliable data is a major challenge for this research. To follow the *Delphi method* was really time consuming. The samples for the quantitative study are gender biased; most of the respondents are male. As the number of female user of E-filing is comparatively lower, so it was difficult to find female respondents to talk about implementation of E-filing. In terms of educational qualification, the respondents for the quantitative study are biased to educated people. Since the illiterate people or the people who have lower level of

education do not have the ability to use the online service or they are not eligible for filing income tax return, they are not included in the survey. Besides the language of the questionnaire and the interview checklist is a challenge for the study. The questionnaires and the interview checklist are formulated in English. The survey may produce more quality data if those were formulated in local language (in Bengali). To overcome this problem, the researcher needs to explain the questionnaire while collecting data. The details of challenges of the study and their strategic responses are given in Table 15:

**Table 15: Challenges for the Research (Risk Log)**

<b>Types</b>	<b>Descriptions</b>	<b>Strategic Responses</b>
Operational	<ul style="list-style-type: none"> <li>▪ To access to the sensitive documents of NBR</li> <li>▪ To get authentic data on E-filing from the respondents</li> <li>▪ Presence of secrecy culture in the public sector</li> </ul>	<ul style="list-style-type: none"> <li>▪ Use of personal connections to get access to the sensitive issues.</li> </ul>
Managerial	<ul style="list-style-type: none"> <li>▪ Due to June closing activities, the respondents were busy with revenue collection that makes some kinds of difficulties in the process of data collection.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Try to avoid potentially troublesome places and periods.</li> </ul>
Organizational	<ul style="list-style-type: none"> <li>▪ In some circle offices, the introduction of E-filing is still in embryonic stage.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Selects alternative circle offices concurrently.</li> </ul>
Psychological	<ul style="list-style-type: none"> <li>▪ As the researcher herself is a civil servant, it is difficult for her to criticize the public organizations or other officials.</li> <li>▪ The disposition of the researcher as a civil servant may lead to pro-bureaucratic interpretations of the data.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Try to depersonalize the data.</li> <li>▪ Try to avoid the preconceived ideas during the interpretations of the data.</li> </ul>

### **3.9 Summary of the Chapter**

This chapter attempts to provide an understanding on the methods of inquiry used in this study; and also focuses on the elements of research design including research approaches, units of analysis, study area, respondent selection, strategy for data analysis and quality of research design. The chapter also tries to cover the sample size of the respondents, nature of information got from respondents, rationale for choosing the mixed method approach, and study limitations. Attempt has also been made to follow ethical dimensions of research. Such magnitude of sketching the methodological chapter helps to collect data perfectly and to draw the finest conclusion based on suitable data analysis. The quality of the research is vital concern of the researcher throughout the research that is also depicted here.

## **CHAPTER FOUR**

### **UNDERSTANDING THE PANOROMA OF DIGITIZATION IN NBR**

#### **4.0 Introduction**

The purpose of this research is to examine the extent of implementation of E-filing that is governed by the income tax department under National Board of Revenue, Bangladesh. This service has been introduced in 2016 across the country to ensure smooth and hassle free taxpayer service via online. This study is an attempt to measure the level of implementation through some explanatory variables. To understand the probable effect of these variables, the study selects six territorial taxes zones from Dhaka (the capital city of the country) and outside Dhaka. The study also selects the head office or the apex body of income tax department i.e. NBR itself to assess the status of implementation comprehensively. The study areas are selected to have different levels of implementation of E-filing to understand the possible variable effects on implementation. This chapter is a brief sketch of income tax department to accustom the reader with the contexts of the selected study areas. It starts with the tax structure of the country and then tries to explore the state of digitization of the services provided by income tax department. These brief illustrations of the study areas can help to understand the backdrops associated with the E-filing system and the implementation dynamics of the respective services.

#### **4.1 National Board of Revenue and Direct Tax Structure in Bangladesh**

National Board of Revenue, the apex authority for tax administration in Bangladesh, was established by President's Order No. 76 of 1972 under the Internal Resources Division (IRD) of the Ministry of Finance (MoF), Government of People's Republic of Bangladesh under the laws of Bangladesh. The NBR is the supreme authority to oversee the matters related to both direct (income tax, travel tax, gift tax, etc.) and indirect (customs & excise duty, and VAT<sup>10</sup>) taxes.

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<sup>10</sup> VAT refers to Value Added Tax

In 1860, during the British colonial period income tax was first introduced in the subcontinent to meet the deficit caused by the '*sepahi bidroho*', in 1857 (Rahman & Linkon, 2007). As income tax is a progressive tax<sup>11</sup> the British India government made it effective by the Income Tax Act 1922. After the independence of Bangladesh in 1971, British Act continues till 1984. Then, in 1984, the British Act was replaced by the Income Tax Ordinance, 1984 and presently in Bangladesh; income tax is imposed under this ordinance.

#### **4.1.1 Time line of Direct Taxes:**

- 1972** - Establishment of NBR
- 1984** - Formation of Income Tax Ordinance, 1984 and Income Tax Rules, 1984
- 1990** - Introduction of self assessment for individual taxpayers
- 1993** - Introduction of TIN (10 digit)
- 1999** - Imposing Surcharge
- 2003** - Introduction of self assessment for corporate taxpayers
- 2004** - Commencement of tax management through LTU
- 2007** - Introduction of Universal self assessment
- 2008** - Launching of highest taxpayers' reward and Income Tax Day
- 2010** - Commencement of Income Tax Fair
- 2011** - Initiation of NBR modernization Plan
- 2012** - Piloting of E-filing and Introduction of e-Payment
- 2013 - Commencement of e-TIN (12 digit)
- 2014**- Formation of Transfer Pricing Cell
- 2016** - Commencement of E-filing across the country

Compared to indirect taxes the contribution of direct taxes is higher in most of the developed countries. In respect of Bangladesh, the scenario was reverse; the contribution of direct taxes was only 10 percent of total tax revenue in the fiscal year 1972-73 (Annual Report, NBR, 2014-2015). Despite repeated reform initiatives had been taken but the contribution of direct taxes was not satisfactory before the fiscal year 2014-15. Data shows that after implementing the modernization plan (2011-

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<sup>11</sup> Progressive tax is a tax that is collected from rich people and disbursed to the poor through education, health, infrastructure development, etc.

2016), the contribution of direct taxes mostly consists of income tax with an insignificant contribution of travel tax climbed up to the uppermost in 2014-15 among the contribution of three wings of NBR i.e. income tax, customs & excise duty and VAT. After implementing the modernization plan of NBR in 2011, the income tax department is operating with thirty one (31) territorial taxes zones including tax survey zone and large taxpayers unit (LTU). Each of the taxes zone comprises of twenty two (22) circle offices and four (4) inspecting range offices. Besides the territorial taxes zones, there are seven (7) taxes appeal zones, eight (8) appellate tribunal benches, one (1) taxes inspection directorate, one (1) central intelligence cell and one (1) BCS tax academy to run the department smoothly. All of the tax offices are centrally monitored by eight (8) tax members of NBR. With a view to providing smooth and hassle free taxpayer service and to increase tax revenue NBR commenced E-filing of income tax return across the 649 territorial taxes circle offices of Bangladesh in 2016.

#### **4.2 Evolution of ICT in NBR: Historical Perspectives and Existing e-services of NBR**

National Board of Revenue, Bangladesh starts its journey of using Information and Communication Technology in its business in 1993 through issuing TIN to the taxpayer. According to Budget Speech of the fiscal year 2011-12, NBR attempted a modernization plan in 2011, through which it has undertaken several initiatives on automation as a part of the governments' Digital Bangladesh agenda (Budget, 2011, p. 1). Through this modernization plan, NBR envisioned to provide commendable services to all taxpayers via web based e-registration, e-filing of tax returns and e-payments/refunds.

##### **NBR website:**

To implement the modernization plan, NBR established a well organized website named [www.nbr.gov.bd](http://www.nbr.gov.bd) in 2011. An automated *tax calculator* has been placed in the website of NBR which is accessible to all taxpayers for easy and accurate tax calculation. Moreover, NBR website provides return forms that could be filled up electronically. These facilities are very popular among the IT educated taxpayers.



Besides, the website publishes various forms, SRO, Clarification, Publications, etc. which can be accessed and downloaded by the user easily.

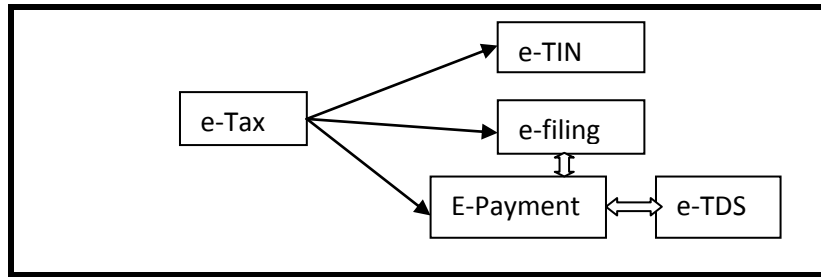
**e-TIN Service:**

To reduce the complexity of issuing TIN (Taxpayers Identification Number), NBR has introduced a web based e-TIN registration process in Bangladesh on 1st July 2013 with the help of IFC. Before submitting income tax return taxpayers having NID (National Identification Number) or Passport can get registration electronically from anywhere at any time. The government of Bangladesh has taken this initiative to encourage mass people include in tax system and to increase tax revenue.

**e-Payment:**

NBR- Sonali Bank e-Payment Portal provides a global standard secured and easy payment service for paying Income tax, VAT and Customs duty through online. It includes the e-TDS (Tax deducted at source). With a view to reduce the challenges and risks of payment via payment order or account payee cheques or challans and to improve the efficiency in collection of taxes National Board of Revenue, Bangladesh introduced the e-Payment system in 2012 with the support of International Finance Corporation (IFC). The private-sector Q-cash network was the gateway to the e-payment of tax through Sonali Bank. Taxpayers having accounts at 34 banks with Q-cash network could pay tax using their debit, credit and prepaid cards along with such cards of Sonali Bank.

Online tax payment facility can prompt taxpayers to pay tax without hassle and also promote online tax return submission. But due to some restrictions the system cannot achieve its goal fully. The much-touted online tax payment system of the National Board of Revenue (NBR) has gone out of order recently. In response to this situation, a senior official of NBR said an improved system of e-payment will be introduced at the second phase of the E-filing project.



**Figure 6: Income Tax Electronic Ecosystem**

**Source:** Website of NBR

#### **Data Forensic Lab:**

As the businesses switch to electronic record keeping from paper based accounting system, the NBR has set up a forensic lab to mine all data including hidden accounts and records from taxpayers' computers to detect tax and financial frauds in 2015. The lab can acquire data from taxpayers' computers and analyze them digitally to investigate suspected tax evasion and financial crimes. This is a big dive for tax officials. Since tax dodging is rampant in the country, so the state-of-the-art facilities of the forensic lab can play a significant role in digging into digital records and analyzing data electronically.

In addition, NBR sets a Taxpayer Service Center or Call Center that provides answers to taxpayers' questions regarding preparation of returns, calculation of tax liabilities, understanding of tax payment systems etc.

#### **4.3 E-filing in Bangladesh: Institutional Arrangements**

Income tax is a progressive tax system. It is imposed on the basis of ability to pay. "The more a taxpayer earns the more he should pay"- is the basic principle of charging income tax. Like most of the developed countries in the world, income tax has become the main source of revenue among other direct and indirect taxes collected by NBR. Even though repeated reform initiatives taken but revenue collection has remained low and the administrative system of NBR has continued to be mostly manual and characterized by high levels of discretion and corruption (Hassan & Prichard, 2014, p. 6). In Bangladesh income tax is being administered

under the tax legislations named as "***The Income Tax Ordinance, 1984(XXXVI of 1984) and the Income Tax Rules, 1984.***"

**Income Tax Authorities:** According to section 3 of the IT Ordinance, 1984; there shall be the following income tax authorities

- The National Board of Revenue;
- Chief Commissioner of Taxes;
- Directors-General of Inspection (Taxes);
- Commissioner of Taxes (Appeals);
- Commissioner of Taxes (Large Taxpayer Unit);
- Director General (Training);
- Director General, Central Intelligence Cell;
- Commissioners of Taxes;
- Additional Commissioners of Taxes (Appellate/Inspecting);
- Joint Commissioners of Taxes (Appellate/Inspecting );
- Deputy Commissioners of Taxes;
- Tax recovery officers;
- Assistant Commissioners of Taxes;
- Extra Assistant Commissioners of Taxes; and
- Inspectors of Taxes.

To achieve the goal of Vision 2021, the government of Bangladesh commenced E-filing of income tax return in 2016. Before commencing online filing government made necessary legal and institutional arrangements. Such as:

#### **A. Ministry of Information and Communication**

Under the Ministry of Posts, Telecommunications and Information Technology, the information and Communication Technology Division which is formed on 10 February 2014 is responsible for developing nation-wide ICT infrastructure in Bangladesh. This division is also handling the national policy issues relating to the digital economy and monitoring the ICT development projects.

#### **B. Member, Tax Information Management & Sheba, NBR**

To achieve the goal of Vision 2021 automation for digital NBR is a burning issue. For providing a better taxpayer services and for smooth functioning of the administrative procedures, NBR created a separate desk headed by a member entitled "*Tax Information Management & Sheba*" in 2011. In spite of having a lot of impediments

to create a less paper NBR, this desk is strongly monitoring the e-services provided by income tax department across the country. This unit is responsible to the entire E-filing system with the help of SGMP project personnel and to monitor the total process of online filing.

### **C. Strengthening Governance Management Project (SGMP), NBR**

To enhance transparency and accountability and increase tax revenues, NBR tries to digitalize the system under the "Strengthening Governance Management Project". As this project committed to develop and adapt computer software for online tax filing, and to build ICT capacity of the income tax circles under the supervision of NBR, it distributed IT equipments like Desktop Computer, UPS, Printer and Scanner etc. to the 649 tax circle offices across the country. All the required system software are installed and tested as well. Now, the Circle offices have got local internet service connected with Data Center to manage taxation administration tasks. Tax officers and staff have been trained on online filing system to manage their tasks in efficient way. At present, all the tax circle offices are functioning as Tax Service Center.

Vietnamese firm FPT Information System Corporation is implementing the project for establishing an integrated income tax administration system and Asian Development Bank (ADB) is providing assistance and fund. Officials said the project was designed in a way which could manage up to three (3) million taxpayers. Now, around 1.5 million taxpayers submit income tax return in the country. The system will have interfaces with National ID project, customs, VAT, Bangladesh Bank, other banks, insurances and treasury system, and standard interface with third party applications. The taxpayers will be able to submit their income tax returns online. Under the system, all other processes including assessment of returns, tax calculation, payment, audit and giving tax clearance certificates can also be done online. Under the project, the taxpayers in all 649 circle offices, including 11 survey circles, will be connected online and the circle offices will share information with each other to ease the process. The system is expected to ensure better revenue distribution, efficient collection of revenue, user-friendly service, fraud detection, higher rate of collection, standard solutions for all tax types in whole tax system,

integrated solution for all revenue types, significant decrease of costs and faster tax collection. Simultaneously, all the return submitted offline are being uploaded to the system.

#### **D. E-filing Support Center**

Under the SGMP project, a support center has been formed to provide instant solution regarding online filing of income tax return through email and phone call.

#### **4.4 E-filing in NBR: A Scene of Policy and Regulatory Context**

The first page of the return form shows the basic information of the taxpayer. In this form grey fields are displayed automatically from TIN of Taxpayer like: name, national ID (if any), TIN, Circle, Taxes zone, assessment year, address, etc. as the system is connected with TIN database. In 2016, the government of Bangladesh commenced E-filing of income tax return for all categories of taxpayer across the country but did not make it mandatory to any. In the same year, the NBR amended the policy regarding return submission under section 75 (4) of IT Ordinance, 1984 about 'return of income' and declared that the Board may by notification in the official gazette,-

*(a) specify that any return required to be filed under this section shall be filed electronically or in any other machine readable or computer readable media (p. 208);*

Through this amendment, online return submission has been made officially authorized. Besides this, there are no other regulatory frameworks for E-filing of income tax return under this Ordinance. There are some regulations issued by the authority to circle offices regarding the operation of the system. Currently the system is running by the above mentioned rules and regulations.

#### **4.5 Actors Involved in E-filing System**

Bangladesh as a developing country, high level policy makers like minister of Finance; Chairman, NBR; Member, Tax Information Management & Sheba; acted as the influential actors for introducing E-filing system at NBR. Furthermore, few expert officials in ICT also played a vital role in founding the system. Member, NBR is monitoring the whole system. With the help of support center all zonal commissioners are the most influential actors for implementing the system.

Importantly, all circle officers are responsible for providing proper service to the taxpayer regarding the service, especially issuing user ID and password. By formulating proper rules and regulations, the policy makers can enhance the total implementation process. Finally the taxpayers and the other beneficiaries like income tax lawyers and ITP can play a significant role in the implementation of E-filing. The persons who need to access in E-filing service are comparatively educated and well-off; they must be responsive about the system.

#### **4.6 ICT Education of Stakeholders**

ICT education of stakeholders is another important factor that can affect on implementation of E-filing. Recently few voluntary organizations have come forward to educate the people on E-filing. Some institutions offers ICT course as an optional subject. Apart from the educational institute and media, important intermediaries such as business association (MCCI, FBCCI), accountants and tax lawyers' firms can play a vital role in educating taxpayer. Nowadays few online based training institutes provide ICT training to the taxpayers as they can catch the opportunity of technology offered by NBR.

#### **4.7 Conclusion**

The study has selected few zones for more precise and better understanding on the dynamics of implementation of E-filing especially the probable challenges which can effect on implementation. Firstly the study tries to find out the impediments faced by the taxpayers while submitting their return through online under the jurisdictions of the selected zones and then the study tries to understand the implementation dynamics in those areas by cross checking the data with the policy makers from the head office. It tries to give an overview of the conventional service delivery system along with the changes after the introduction of E-filing in the sample areas. This brief overview can quickly accustom one with the administrative, institutional and regulatory framework of the study areas.

## **CHAPTER FIVE**

### **DATA ANALYSIS AND PRESENTATION OF RESEARCH FINDINGS**

#### **5.0 Introduction**

The rationale of data analysis is "to determine the broader meaning of the data to be analyzed and to produce significant inferences or insights with respect to data within the given theoretical model" (Aminuzzaman, 1991, p. 101). This chapter is a detailed display of the statistical trends between the extent of implementation of E-filing and various factors that have an effect on level of user satisfaction. An attempt has been made to measure the satisfaction about the system based on the surveyed data. To understand the probable effects of the easiness of the system on the implementation of E-filing, the study analyses correlation among the variables. Then the research tries to understand the extent of challenges to successful implementation of E-filing through the data collected from E-filing user and manual filing user. Simultaneously the study tries to explore the effects of other explanatory variables of the research on the level of implementation of E-filing. The study tries to optimize the output gathered through the surveyed data and to minimize the methodological inflexibility to explore the possible causalities. In addition, this chapter tries to indicate the limitations in reaching inferences of the study.

#### **5.1 Mapping the Extent of Implementation of E-filing in the Study Area**

The theoretical logics of this research indicate that implementation of E-filing may have been influenced by the independent variables considered in the analytical framework of the study. The extents of implementation are measured through the level of satisfaction of the user as well as the implementers. Higher level of satisfaction about E-filing may have a positive relation with implementation compared to lower level of satisfaction. According to Anderson (1998), satisfaction can be exposed with clarity of information, access to service and facilities, access to communications, expectations and acceptance of service levels, etc. (p. 16). In this research, satisfaction about E-filing is based on easy access to the online tax processing system and website and getting proper e-services. The variations of the

dependent variable have been measured through the scaling by the respondents' perceptions. To rank the satisfaction level and the level of trust on the software for submitting return through E-filing, the respondents (E-filing user) are asked to answer direct question designed in *likert scale* on these issues. The study tries to understand the extent of implementation of E-filing on the basis of the variation of perceptions of the sample respondents about E-filing.

**Table 16: Respondents' Perception on levels of Satisfaction about E-filing**

	Satisfaction level of the Respondents about E-filing			Level of trust of the Taxpayer on the Software		
	Low	High	Total	Low	High	Total
<b>Frequency</b>	6	29	35	1	34	35
<b>Percent</b>	17%	83%	100%	3%	97%	100%

To understand the level of implementation of E-filing at NBR elaborately, the respondents who have already used the system were asked about the level of satisfaction about the system and level of trust on the software. From the table (16) it is shown that 83 percent users have high level of satisfaction about E-filing and among them 97 percent have higher level of trust on the software. The questions were designed in 1 to 6 scale (1= very unsatisfactory and 6= very satisfactory). During analysis, scale 1 and 2 are converted to low level category and rests are converted to high level category.



**Table 17: Level of Overall Satisfaction (satisfaction level + trust level) about E-filing**

	Minimum	Maximum	Mean	Std. Deviation
Level of Overall satisfaction	3	6	4.57	.892
Satisfaction level of the Respondents about E-filing	1	6	4.29	1.274
Level of trust of the taxpayer on the software	3	6	4.86	.810

**Questions were asked: 1) Please state your satisfaction level for submitting returns through E-filing (Low =1 and 6 = High)  
2) Please state your level of trust on software for submitting returns through E-filing (Low =1 and 6 = High)**

In addition to describing data in frequency table, researchers calculate the mean value with standard deviation through descriptive statistics of SPSS. Here, the study attempts to explain different scores between groups by looking at the variability between the groups. Table (17) shows that the satisfaction level of the respondents about e-filing (4.29) is lesser than the level of trust of the taxpayer on the software (4.86). In case of satisfaction level, the value (1.274) of standard deviation is higher than the deviation (.810) found in the level of trust. It means that the first group gives more different opinions than the following group. At the same time, in case of overall satisfaction the mean value (4.57) is closer to SD than the deviation found in the satisfaction level. That means the respondents gave the answers almost in a same scale. Theoretically, if the value of standard deviation found smaller, the accuracy of the estimate will be higher.

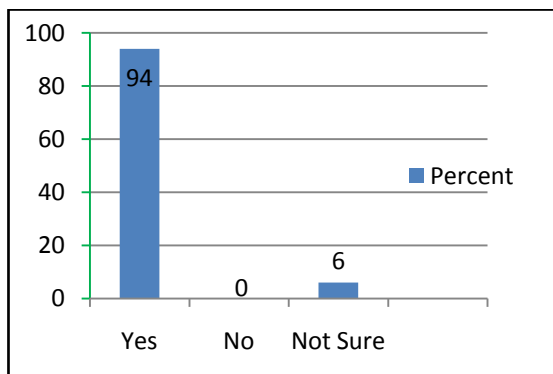
**Table 18: Satisfaction level of the Officials on the current state of implementation of E-filing**

**(Descriptive Statistics)**

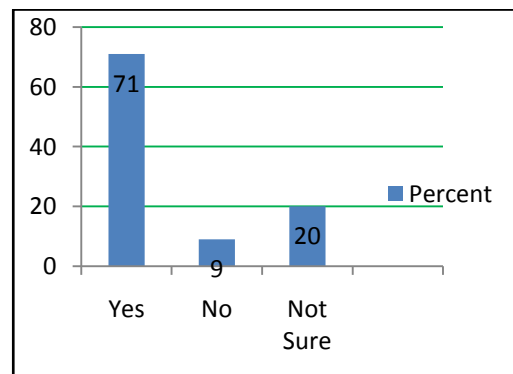
	Minimum	Maximum	Mean	Std. Deviation
Satisfaction level of the Respondents on the current state of implementation of E-filing	3	5	4.10	.568

To measure the extent of implementation of E-filing at NBR, the study considers the satisfaction of service providers also. During interview, they were asked about their level of satisfaction on the current state of implementation of online return filing in the same manner asked to the E-filing user. By analyzing the surveyed data through descriptive statistics of SPSS, it is shown that the mean value is (4.10). It reflects that their level of satisfaction is 'nearly satisfactory'. The value of standard deviation is also low (.568). That means this group of respondents are not different in opinion about the current state of implementation of E-filing.

In another way, the study tries to examine the extent of implementation by raising another question. That is, the respondents from both ends were asked about willingness of submitting their next income tax return via online.



**Figure 7: About willingness of submitting next return through online(E-filing user)**



**Figure 8: About willingness of submitting next return through online (Manual filing user)**

From the above two graphs (Figure 8 and 9), it is found that 94% of E-filing user will surely submit their next return via online and 71% of manual filing user want to grasp the facilities of technology in the following year. Here it is pointing out that among the respondents of manual filing user 20 percent are the representatives of taxpayer including ITP and income tax lawyer.

## 5.2 Exploring the Trends between the Explanatory Variables

### 5.2.1 Implementation of E-filing based on Perceived Ease of Use

The implementation of E-filing could also be dependent on the nature of easiness of the entire system. That is why; to examine the level of implementation, the ease of use has been considered as one of the independent variables which are measuring through the easy use of the software, easiness of calculating taxes through the software, time savvy nature of the system, helpfulness as regards of issuing tax clearance certificate etc. The taxpayers who have submitted their income tax return through online were asked to make rating on few statements related to these indicators. Actually these statements are formed considering the characteristics that motivate the taxpayers to use E-filing. The rating were taken in 1 to 6 scale (1=strongly disagree and 6=strongly agree). That means the statement which has been rated on scale 6 can be identified as most significant feature of E-filing at NBR. At the stage of data analysis, these six scales have been converted into two major scales that are 'disagree' and 'agree'.

**Table 19: Observation related to E-filing service based on Experience of E-filing user**

Particulars	Values in Percentage (%)	
	Agree	Disagree (including don't know)
<b>System is easy to use (User friendly)</b>	58	42
<b>Easy to calculate taxes</b>	80	20
<b>E-filing services can save time and money</b>	92	8
<b>Providing acknowledgement slip, certificate shortly</b>	86	14

The above table (19) shows that among the users of E-filing, 58 percent agree that the system is easy to use i.e user friendly. Among the four features of the system the easiness of the system (user friendly nature) scores lower. But 92 percent people agree that the system can save time and money of the user. About 80 percent of the E-filing users believe that system is helping to calculate taxes and about 86 percent of the respondents of the study rate positively on the very nature of helpfulness of the system. That means the system is providing acknowledgement slip and certificates in a moment.

**Table 20: Pearson Correlation Coefficient between Satisfaction level and four indicators of Ease of Use**

	Satisfaction level of the Respondents about E-filing	System is easy to use	Easy to calculate Taxes	E-filing can save time and money	Providing acknowledgement slip, certificate easily
Satisfaction level of the Respondents about E-filing	1				
System is easy to use	<b>.638**</b> .000	1			
Easy to calculate Taxes	.371* .028	.460** .005	1		
E-filing can save time and money	.363* .032	.436** .009	.264 .125	1	
Providing acknowledgement slip, certificate easily	.206 .236	.189 .278	.261 .129	-.058 .743	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

The statistical findings of the research signify that the changing dynamics of these variables have significant impact on increasing or decreasing the level of satisfaction

about E-filing. Correlation coefficients may denote the nature and the degree of the probable relationships among the dependent and independent variables of the study. Firstly, for the satisfaction level and Ease of use;  $r=0.638$  and  $p<0.01$ , these values indicate that there is strong positive correlation between these two variables. This result indicates that both of the variables walk in the same direction. In another word, it can be said that with the increases of the easiness of the system the satisfaction level of the user also increases. When the correlation among the satisfaction level and Easy to calculate taxes is considered, it shows;  $r= .371$  and  $p<0.05$ . This means with the increases of easy calculation method of the system the level of satisfaction increases. Similarly there is a positive correlation between the level of satisfaction and money and time savvy nature of the system as  $r=.363$  and  $p<0.05$ . However, in the case of helpfulness by providing acknowledgement slip, certificate shortly and level of satisfaction, the study shows a very low positive correlation. This may happen due to the highest level of necessity of acknowledgement slip, certificate in the sample areas.

As a whole, the variable 'Perceived Ease of Use' shows a low significant positive correlation with the extent of implementation of E-filing. Though the result does not show any statistically significant trends since  $p > 0.05$  in most of the cases but as a whole, the variable has a positive influence on implementation. The study assumes that due to having a small sample size, such type of result is found.

### **5.2.2 Multiple Linear Regression Model: Understanding the Effects of Perceived Ease of Use on Implementation of E-filing**

'Multiple regression' is a refined expansion of the linear regression and it is used to predict the value of a set of explanatory variables based on the value of one dependent variable (Pallant, 2013, p. 103). This statistical tool of SPSS is used to explore the forecasting ability of the independent variables (Easy to use, Easy to calculate, Time and money savvy, Helpfulness nature) in explaining the dependent variable (the extent of implementation of E-filing) of the study. The study develops various models through SPSS to examine how far these independent variables can

explain the variation in the dependent variables. The study mainly tries to discuss these models elaborately.

### 5.2.2.1 Assessing the Overall Fit of the Regression Model

The table (21) represents the overall fit of the regression model. This model determines the range of variation of the independent variables that are used to develop the model can explain the deviations of the dependent variable. It also indicates about the predictors<sup>12</sup> of the model that explain the changes of the dependent variable.

**R-square** also known as coefficient of determination is one of the significant values to explain. The coefficient of the multiple correlations is indicated as **R**, which ranges from 0 to 1 (Elite, 2013, p. 6). The value of R-square calculated by the regression model indicates the amount of variation of the dependent variable (Pallant, 2013, p. 158). If a small sample is used, the R-square value in the sample tends to be slightly optimistic observation of the true value in the area. The statistics of the Adjusted R-square always provides a better estimation (Ibid, 6).

**Table 21: Summary of the Overall Fit of the Regression Model**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>1</b>	.646	.417	.339	.726

- a. Predictors: (Constant), Helpfulness, Time and money savvy, Easy to calculate taxes, Easy to use the system
- b. Dependent Variable: Level of Satisfaction of the E-filing user

Table (21) shows that the R-square value is 0.417. That means 41.7 percent variation exists within the dependent variable i.e. 41.7 percent of variations amongst extent of implementation of E-filing can be explained through this model. To get more sophisticated estimation, adjusted R-square can be considered. Here the adjusted R-square value is **0.339**. It indicates that though the predictive power

<sup>12</sup> In regression analysis, scores of one variable are predicted based on the scores of a second variable. The variable that are **predicted** is called the **criterion variable** and is plotted on Y axis. The variable based on which **predictions** are made is known as **predictor variable** and they are plotted on X axis.

to some extent decline but still it can explain 33.9 percent of the variations. The regression model makes an estimation of the accuracy of the predictions through SEM (standard error of the estimate). Statistically, better prediction is produced with the smaller standard error of estimate. The above table shows the value of SEM is less than 1, it means that the standard error of the regression model is comparatively low.

#### 5.2.2.2 Assessing the ANOVA Test Result of Regression Analysis

The ANOVA<sup>13</sup> test can help to evaluate the statistical significance of the expressive power of a model (Pallant, 2013, p. 161). This test helps to understand whether the predictive power emerged through the regression model are real or random power. According to Kirkpatrick et.al every ANOVA test consists of two types of variance of the dependent variable; one is about the 'regression', which indicates the predictable portion of the regression model while the other part is the 'residual or error' which cannot be predicted by the model (Kirkpatrick and Feeney, 2011, P. 85). The table (22) indicates that  $F(4, 30) = 5.358$  and the model is statistically significant with  $p < 0.01$ . Finally, it can be said that, the model is statistically significant to explain the variations in the dependent variable as the 'p' value is low.

**Table 22: ANOVA test Result of Regression Analysis**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	11.280	4	2.820	5.358	.002 <sup>b</sup>
Residual	15.791	30	.526		
Total	27.071	34			

a. Dependent Variable: Level of Satisfaction of the E-filing user

b. Predictors: (Constant), Helpfulness, Time and money savvy, Easy to calculate taxes, Easy to use the system

#### 5.2.2.3 Assessing the Coefficients of Regression Analysis

The ANOVA test explains the statistical significance of the regression analysis but it does not designate which indicators of the model can give details about the variation

<sup>13</sup> ANOVA stands for Analysis of Variance

of the dependent variable. For this, "the coefficients of the regression analysis can explain which independent variable provided the prediction of the dependent variable" (Pallant, 2010, P. 161). This model (table 23) provides two types of coefficients. These are unstandardized coefficients and standardized coefficients. If the values of each variable are converted to the same scale, then it is called standardized coefficients (Ibid, 161). The beta value ( $\beta$ ) helps to compare the contribution of the explanatory variables. The 'p' values can measure the contribution of the statistical significances of the variables. Table 23 indicates that 'p' value for 'easy to use the system' is less than .05 i.e. it showing statistically significant coefficients. The 'p' values for the rest of the variables are not showing any significant coefficients. The table 23 indicates that the largest  $\beta$  coefficient is 0.372, which is for 'easy to use the system'. This signifies this explanatory variable have the major contribution in explaining the dependent variable. The next variable which are contributing to explain the changes in the dependent variable is 'time and money savvy nature of E-filing' as  $\beta = 0.260$ . The other two variables are not showing any significant contribution in explaining the dependent variable.

**Table 23: Coefficients of the Regression Analysis**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig. (p)
	B	Std. Error	Beta ( $\beta$ )		
Constant	1.648	.932		1.768	.087
Easy to use the system	.200	.092	.372	2.182	.037
Easy to calculate taxes	.077	.106	.117	.723	.475
E-filing can save time and money	.238	.145	.260	1.643	.111
Helpfulness	.126	.111	.168	1.142	.263

a. Dependent Variable: Level of satisfaction of the E-filing user



#### 5.2.2.4 Assessing the Residual Statistics of Regression Analysis

A residual plot (Figure: 9) that shows the residuals<sup>14</sup> on the vertical axis (y) of the diagram and the explanatory variables are plotted on the horizontal axis (x). The data points in the residual plot are randomly dispersed roughly in the horizontal axis so, a linear regression model is appropriate for the data.

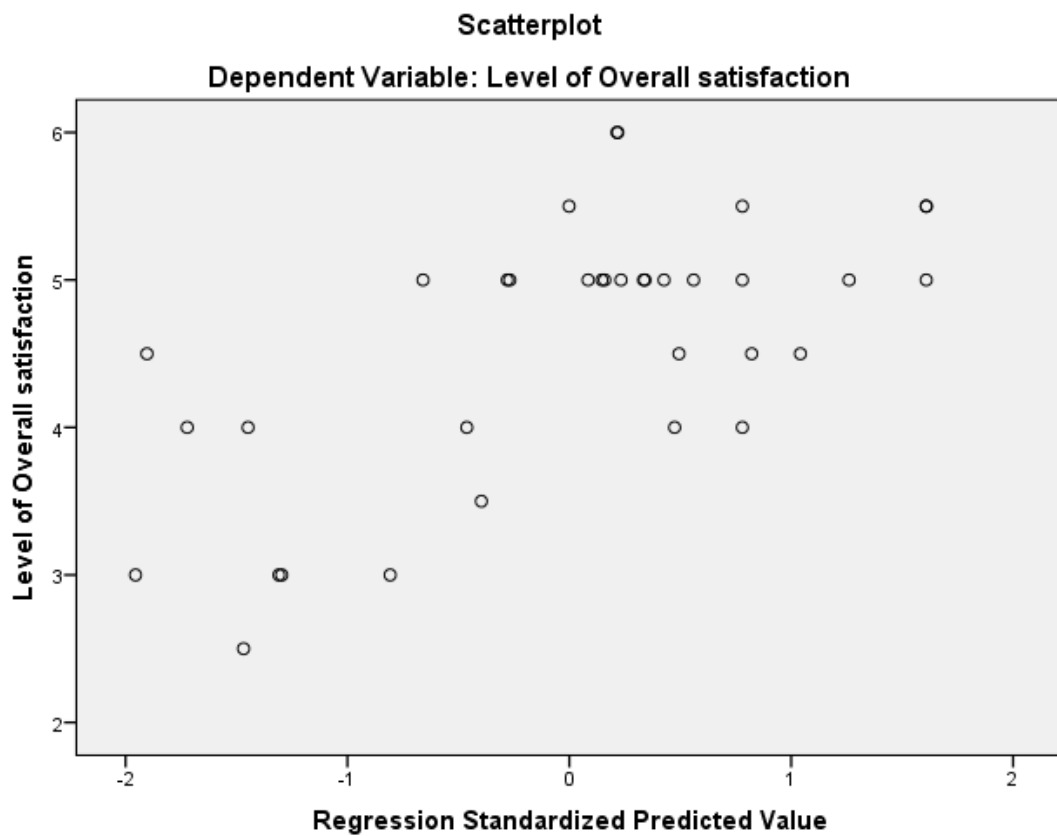


Figure 9: Scatter plot of Residual Statistics of Regression Analysis

<sup>14</sup> In regression analysis, the residual refers to the difference between the observed value of the dependent variable and the predicted value. Each of data point contains one residual value. The sum and the mean value of the residuals are always equal to zero.

The mean value of residuals is always equal to zero (0), as (the mean = the sum of the residuals / the number of items). As the sum is zero, so  $0/n$  will always equal to zero.

**Table 24: Residuals Statistics**

	Minimum	Maximum	Mean	Std. Deviation
<b>Predicted Value</b>	3.45	5.50	4.57	.576
<b>Residual</b>	-1.226	1.305	.000	.682
<b>Std. Predicted Value</b>	-1.955	1.608	.000	1.000
<b>Std. Residual</b>	-1.689	1.799	.000	.939

a. Dependent Variable: Level of Overall satisfaction

### **5.2.3 Implementation of E-filing based on the Context**

#### ***5.2.3.1 Obstacles of Implementation Identified by E-filing user***

The respondents who already used the service were asked to rate on some statements identified as obstacles to successful implementation of E-filing. The rating were taken in 1 to 6 scale (1=strongly disagree and 6=strongly agree). That means the statement that is rated on scale 6 has been identified as the biggest challenge for implementing E-filing of income tax return at NBR. At the stage of data analysis, six scales have been converted into two major scales that are 'disagree' and 'agree'.

**Table 25: Ratings on Obstacles of E-filing services by E-filing user****Descriptive Statistics (N=35)**

Obstacles	Mean		Std. Deviation
	Statistic	Std. Error	Statistic
<b>User unfriendly software and website</b>	<b>4.03</b>	.267	1.581
<b>Resistances from staff level officials</b>	2.94	.222	1.237
<b>Unsafe and unsound system</b>	2.71	.190	1.126
<b>Lack of awareness among taxpayers</b>	<b>4.85</b>	.220	1.282
<b>Lack of competence among service providers</b>	3.97	.258	1.507
<b>Obstacles arising from the mediator group like Tax Lawyer, ITP</b>	3.53	.236	1.376
<b>Lack of promotional activities</b>	<b>4.63</b>	.250	1.477
<b>Resource constraints</b>	<b>4.23</b>	.197	1.165
<b>Low speed of Internet</b>	3.94	.286	1.669
<b>Lack of online tax payment facility</b>	<b>4.23</b>	.272	1.610

The statistics (Table: 25) shows that highest mean value (4.85) is found for the statement relating to lacking of awareness among taxpayers, subsequently the lacking of promotional activities is determined as the second largest obstacle with mean value 4.63 and then lack of tax payment facility along with resource constraint stand third position with mean value 4.23. User unfriendliness of the software and website are positioned in fourth as obstacle in successful implementation of E-filing. Lack of competence among the service providers and low speed of internet are also identified as the major challenges. The current study assumed that high level of

resistances arises from the lower level staff and the mediator group, but the findings shows the different results.

### **5.2.3.2 Obstacles of Implementation Identified by Manual filing user**

Similar question was designed for manual filing user who didn't use the system but some of them tried to use the system and failed. To measure the competence level of those respondents, the study formulated a question using the same scaling method.

**Table 26: Competence level of the Respondents (Manual filing user)**

<b>Descriptive Statistics (N=35)</b>			
	Mean		Std. Deviation
	<b>Statistic</b>	<b>Std. Error</b>	<b>Statistic</b>
Competence level of the Respondents (manual filing user) about ICT	5.09	.155	.919

Data shows that most of the respondents in this category have high level of competence (mean value is 5.09 where minimum value=1 and maximum value=6) on ICT i.e Information and Communication technology.

**Table 27: Ratings on Obstacles of E-filing services by Manual filing user**  
**Descriptive Statistics (N=35)**

Obstacles	Mean		Std. Deviation
	Statistic	Std. Error	Statistic
<b>User unfriendly software and website</b>	<b>4.00</b>	.205	1.213
<b>Resistances from staff level officials</b>	3.40	.269	1.594
<b>Unsafe and unsound system</b>	2.91	.144	.853
<b>Lack of awareness among taxpayers</b>	<b>4.74</b>	.185	1.094
<b>Lack of competence among service providers</b>	<b>4.20</b>	.245	1.451
<b>Obstacles arising from the mediator group like Tax Lawyer, ITP</b>	3.86	.272	1.611
<b>Lack of promotional activities</b>	<b>4.63</b>	.209	1.239
<b>Resource constraints</b>	<b>4.26</b>	.202	1.197
<b>Low speed of Internet</b>	4.17	.258	1.524
<b>Lack of online tax payment facility</b>	<b>4.46</b>	.233	1.379

In case of manual filing user similar statistical tool has been used and almost similar findings have been found. Data (Table: 27) shows that lacking of awareness among taxpayers as an obstacle scored first with the highest mean value (4.74). Then the statement related to the lacking of promotional activities is determined as the second largest obstacle with mean value 4.63. Interestingly this value is same as the value generated at E-filing user level study. Lack of online tax payment facility as an obstacle is placed in the third position bearing with mean value 4.46., Resource constraints, lack of competence among the service providers, low speed of internet, user unfriendliness of the software and website etc are also identified as the major

obstacles for successful implementation of E-filing. But the taxpayers are not much scared about the risk and security issues of the system. Table (27) shows that the statement named 'unsafe and unsound system' attains the lowest mean value. Resistances from the lower level staff and from the mediator group are not seen as much as high level of resistances in the implementation of E-filing. One of the interviewee also said that *"resistances are coming from the higher level officials not from the lower level staffs"*.

**Table 28: Regarding Responses of Business Community/Taxpayers to E-filing**

	E-filing user		Manual filing user	
	Frequency	Percent	Frequency	Percent
Positively	16	46	23	66
Negatively	5	14	3	9
Not Sure	14	40	9	25
Total	35	100	35	100

The above data are gathered from the both level of respondents to understand the attitude of the beneficiary group of this service. Statistical data show that among the E-filing user 46 percent people think that the business community or the taxpayers are positively responding to this service but a major portion of the respondents (40 percent) are not sure about the responses of the business community. On the other hand, only 14 percent people think that taxpayers are negatively responding to the service. Interestingly, highest percentage (66 percent) of respondents from manual filing user end consider that business community positively responses to E-filing.

#### **5.2.4 Implementation of E-filing based on Perceived Usefulness**

To capture the probable effects of E-filing, the study includes those areas which have different levels of implementation of the service. In those study areas, different levels of officials were asked *'what could be the potential outcome of E-filing system'*? According to their opinion, proper implementation of E-filing can generate a lot of possible outcomes which may have a significant positive influence on job

performance and productivity of the officials. Some of the respondents said about the same outcomes but some of them opine in different way. So, from the research area a number of findings have been produced. By applying the "narrative analysis" method, the study makes more than a few revisions of the primary qualitative data and then wraps up with the following findings:

- The system helps to develop trust on government;
- It will broaden the vision of the officials by inserting new technology;
- System generated audit selection and finest return processing can be ensured;
- Easy report generation through system generated registers will ensure real time reporting;
- Officers will be able to input the arrear demand in the system;
- System generated return submission certificate and acknowledgement slip can save the time of the officials;
- Improved office management can be brought by increasing paperless activities;
- Quality work will increase as the work load decrease;
- Good governance can be ensured through transparency;
- Time and Cost savvy service can be brought;
- Hassle free service will ensure real time service delivery;
- It will develop confidence of the officials on E-filing/digital system;

In another question, the interviewees were asked that ***"do you think that online filing will increase the job performance and productivity of the officials? If yes, then how does it will increase?"*** To answer this question 100 percent of the officials replied ***'yes, of course'***. The main explanation about the causes of increasing job performance and productivity through the proper implementation of E-filing can be cited as:

*"Officers can concentrate on many intellectual issues rather than doing some clerical tasks like return receiving, tax clearance certificate distribution, selecting audit files etc. as these jobs will be done automatically and correctly by the system. Moreover, lots of paper work and arithmetic calculations will be done by the system and thus officer shall be able to focus on many supervising activities to mobilize revenue from taxpayers".*

Regarding this issue, one of the high level officials said that ***"if the system works successfully, officer can find any file with a single click and thus huge time will be saved. So, the job performance will reach at the peak."***

At the level of manual filing user, the respondents were asked to evaluate the efficiency level of the government on handling the E-filing system. This question was designed on 1 to 6 level scaling methods.

**Table 29: Efficiency level of the Government in Handling E-filing (Manual Filing user)**

**Descriptive Statistics (N=35)**

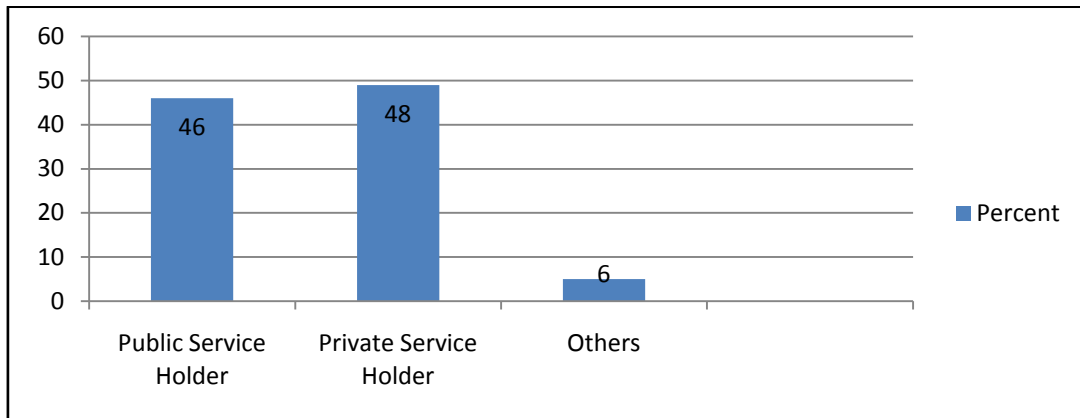
	Mean		Std. Deviation
	Statistic	Std. Error	Statistic
Satisfaction of the taxpayer on Efficiency level of the Government in Handling E-filing	3.91	.237	1.401

The table shows the mean value for the efficiency level of the government is 3.91 where the minimum value is 1 and maximum value is 6. Comparatively higher standard deviation means that the respondents' satisfaction level on the efficiency level of the government in handling E-filing is varied largely. This average level (3.91) of confidence on governments' performance may have an effect on the extent of implementation of E-filing.

### **5.2.5 Implementation of E-filing based on Demographic Variables**

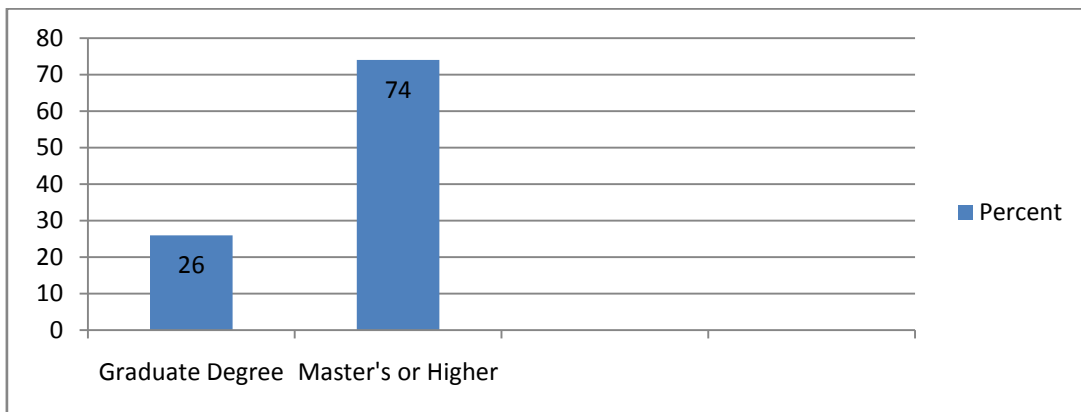
The demographic data for all categories of respondents have been analyzed elaborately in the methods of inquiry chapter of this paper. The socioeconomic profiles include age, education and occupation of the taxpayer. As E-filing is newly introduced technology based system, the user of E-filing is very limited and document analysis shows that the users are very much confined to salaried taxpayer category. Survey data shows (Figure: 10) that the respondents are restricted within three categories of taxpayers only i.e public service holders (46 percent), private service holders (48 percent) and others (6 percent).





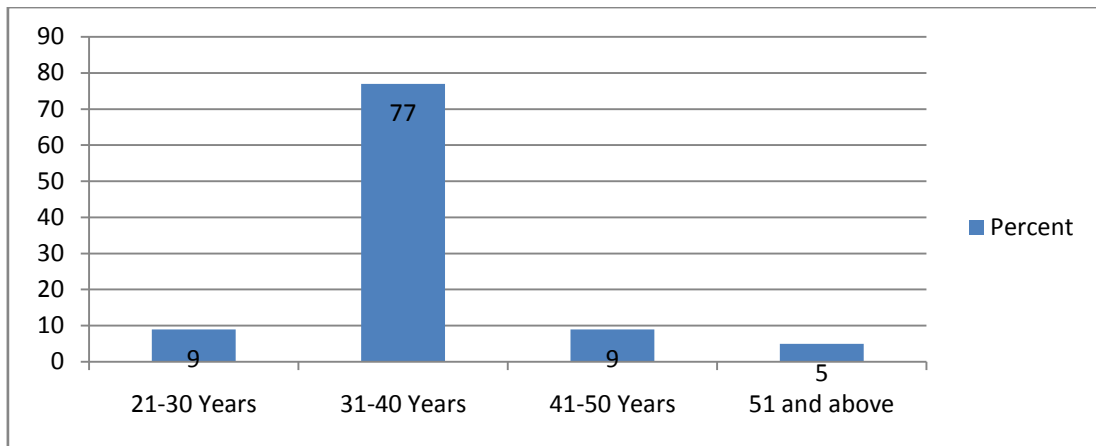
**Figure 10: Respondents' Distribution based on Occupation (E-filing User)**

The respondents of this study have at least graduation degree in terms of *educational level*. This type of result has been produced as the illiterate people or less educated people may not be able to use the system or they are not eligible for paying income tax. The majority of the respondents (Figure: 11) from E-filing user level have Master/higher degree (74 percent) or graduate degree (26 percent). That means a certain groups of taxpayer who have required level of IT knowledge for using the system are using the system.



**Figure 11: Respondents' Distribution based on Education (E-filing User)**

In terms of age group, the respondents' age varies from 21-30 age groups to 51 and above. But the study finds a narrow variation in the *age* ranges of the sample respondents from E-filing user categories. At the E-filing user level, the study shows (Figure: 12) that most of the respondents are from 31-50 age groups (77 percent).



**Figure 12: Respondents' Distribution based on Age Group (E-filing User)**

Since E-filing is a technology based government service, young and educated people have been found as customer mostly. Based on document analysis, the study uses 'purposive sampling' and 'convenience sampling' method for selecting respondents. So, the study finding does not show any major variation among the demographic data that can be used to any statistical analysis chosen for this study.

### 5.2.6 Implementation of E-filing based on the Content of Policy

The implementation strategies that are designed at the policy formulation stage can have an effect on the scope of implementation. The introduction of E-filing can provide an alternative channel for the specific group of taxpayer instead of the traditional manual filing system. However, only the introduction of E-filing does not necessarily lead to bring the full benefit of advanced technology but to promote the system among the taxpayer can play a vital role to successful implementation. At the time of interview one of the field level officials of NBR opines that *"the introduction of E-filing for all categories of taxpayers like, Individual, Firm, and Company at a time makes the system more complex"*. One of the main obstacles for performing better in implementation of online filing is the existing policies, statues and regulations. That means the existing rules and regulations do not carry any obligatory position to E-filing or any inspiring point that can boost up the implementation.

To know the opinion of the policy level officials of NBR two questions were asked through the interview checklist. These are *"do you think that existing policies, statutes and regulations are sufficient to promote the system in Bangladesh"*? And if not sufficient then what changes are required in the policies, statutes and

*regulations?* From the feedback of the interviewees, it appears that they are not fully satisfied with implementation strategies that presently exist at NBR regarding E-filing implementation. One of the very important people who have direct connection with the system opines that to reach at the good level of implementation, NBR should take some important strategies such as: "*making E-filing compulsory for specific group of taxpayer with specific limit of income; salaried taxpayers return have to be filed through this system*". Finally, by analyzing the views of the respondents it can be stated that *cluster wise implementation can be an effective way of implementation of E-filing.*

One open ended question about implementation strategies was designed for both level of respondents i.e. E-filing user and manual filing user. The respondents were very tactful while giving suggestions about proper implementation strategies for successful implementation of online return filing in Bangladesh. The following table has been formulated by analyzing those qualitative data through '*framework analysis*' method. To analyze these data, the study firstly assemble the data then getting used to, identifying a thematic framework, coding, tabling, and interpreting to link with the dependent variable of the study.

**Table 30: Ranking of Implementation Strategies of E-filing at NBR based on the Respondents Opinions (in %)**

Patterns of Strategy	At E-filing user level	At manual filing user level
Making it compulsory for a specific group of taxpayer primarily	94	97
Ensuring some incentives like rebate, time extension for return submission etc.	100	74.2
Making the interface more easy and add online tax payment facility including mobile banking	77	40
Making large scale campaign through print and electronic media	48.6	34.2
Arranging lots of training for the beneficiary group as well as for the implementers	28.5	20
Might be compulsory for only old verified taxpayers from private & public services, then company & other qualified group.	5.7	0

Question was asked: What are your suggestions/recommendations for successful implementation of E-filing of income tax return in Bangladesh? (Please put (v) mark, multiple answers can be given)

1. Making it compulsory for a specific group of taxpayer primarily
2. Ensuring some incentives like rebate, time extension for return submission etc.
3. Others (Please Mention).....

**(Note:** Respondents have multiple responses)

*From the above table, it can be inferred that 'opening E-filing for all types of taxpayers at a time' is not a good strategy to implement such an advanced technology based system in the present context of Bangladesh.*

### **5.3.1. Additional Observations during the study**

As a former employee of NBR for five years, the researcher assumes that only a certain types of corruption can be reduced through E-filing. The study also guesses that online filing of income tax return at NBR may be more effective in reducing *petty corruption* than the *grand corruption* like the policy or strategic level corrupt

practices. Generally, the lower and mid level staffs of public offices receive bribes or other kinds of illegal benefits while providing services. It is expected that the bargaining power of the corrupt officials for the illegal benefits can be curtailed through the insertion of an alternative service delivery channel via electronic platform. Thus, successful implementation of E-filing can reduce the degree of '*petty corruption*' of income tax department. This type of reduction in petty corruption may contribute in establishing good governance in the developing countries like Bangladesh.

The following are the significant observations that the study finds during data collection. The respondents from all categories were very much willing to respond to the questions asked about the role of E-filing in reducing petty corruption<sup>15</sup> at NBR. The question was designed in 1 to 5 scaling method asked to all respondents participated in the research.

**Table 31: Role of E-filing in reducing petty corruption**

Respondents	Mean	Std. Deviation
<b>E-filing user</b>	4.20	.942
<b>Manual filing user</b>	3.77	.833
<b>Service provider</b>	4.40	.699

The highest mean value (4.40) with lowest standard deviation (0.699) is calculated from the data collected from the service providers of NBR. This means like the researcher, the field level implementers along with policy level officials of NBR believe that E-filing can fairly reduce the rate of petty corruption in the income tax department of Bangladesh. Subsequently the E-filing user's rating placed in the second position containing mean value (4.20) and lastly the manual filing user's rating positioned in the third place. That means the manual filing user gives their opinions in slightly lower scale.

<sup>15</sup> **Petty corruption** refers to the minor abuse of assigned power by low and mid level public officials in their daily interactions with service seekers.

### **5.3.2 Necessary Pre-requisites for E-filing Implementation**

From the feedback of implementers, it can be summarized that the following prerequisites are essential for proper implementation of E-filing of income tax return. These can influence to widen the performance of the government.

- Setting up of a fully equipped IT unit to ensure continuous monitoring to the zone about implementation of the system.
- Trainings, Workshop should be arranged in different taxpayer's hub like corporate offices, universities, public offices, etc.
- Make specific rule or provision to file return electronically
- Providing necessary training to both service providers and service receivers including income tax practitioners and lawyers.
- Adequate financing to all offices as they can provide uninterrupted services
- Public awareness building through IT oriented education, promotional activities likes advertisement, drama, movie, etc.
- Continuous up gradation of the system is needed to ensure user friendly software
- Several phases of project is needed to implement the system fully
- More enforcement activities should be included in the implementation strategies.
- Motivation yielding strategies should be brought.

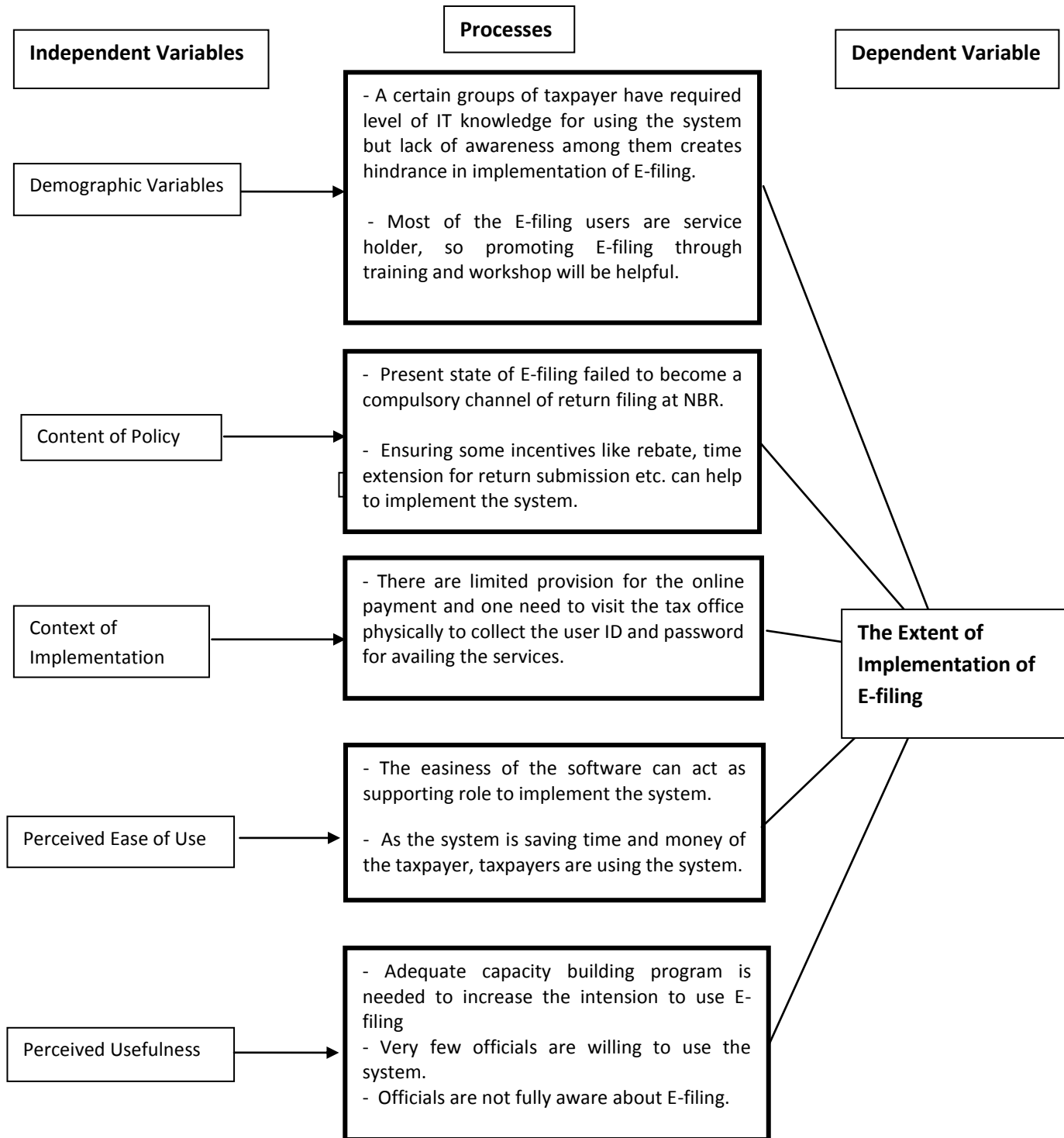
### **5.4 Limitations of the Statistical Trends for the Study Findings**

The extent of variations of the variables has been estimated through the quantitative study which depends on the scaling built through the opinions of the sample respondents. Since this ranking is produced on the basis of the perception of the sample respondents and the size of the sample are small, so the rankings can be just a sign of the trends. The ranking trends can be varied from person to person. For example, bearing the same opinion one can rank the level of an indicator as 1 (one) while other can put that as 2 (two). This type of variation may have significant impacts on the end result as the size of the sample is small. Consequently the ranking of the variables and their 'correlation coefficient' can provide only an idea of the probable effects of the independent variables on the implementation of e-filing.

However, the qualitative data as discussed along with quantitative data sometimes confirm the same trends that are appeared from the statistical analyses.

## **5.5 Conclusion**

Firstly, the dependent variable of the study has been analyzed in terms of satisfaction level of the users of E-filing system as well as the level of satisfaction of the implementers about the current state of implementation of E-filing. This discussion is included in the research design to get better understandings about the present position of implementation of E-filing at NBR. The study finds that the level of implementation still measured in average level due to various factors. Then the study analyzes the collected data and these data are significantly influencing on implementation. The causal relationship between and within the dependent and the independent variables have been discussed and the study tries to identify the relation between them. Ease of use, easy to calculate taxes, time and money savvy nature of the system, and helpfulness nature of the system are positively correlated with the satisfaction level of the user, but the strength of those relationships is not as high as assumed. Easiness of the system has the greatest correlation coefficient with user satisfaction among others so it is the most influencing factor than others. The challenging factors that have considerable influence on implementation of E-filing are also determined by the study. Among the factors, the lacking of awareness of the taxpayer is appeared as the major challenging factor. So the study indicates that just the introduction of a system is not enough to create a paperless office, but its nature, the implementation strategies, the context of implementation, etc. are important to make it successful.



**Figure 13: The Effects of Independent variables on Implementation of E-filing at NBR, Bangladesh**



## CHAPTER SIX

### CONCLUSION AND IMPLICATIONS OF THE STUDY

#### 6.0 Introduction

The concluding chapter goes over the main points and provides a short overview of the key findings of the relationships between explanatory variables and implementation of E-filing. The findings are drawn on the basis of empirical evidences collected through quantitative and qualitative method from both service receivers' level data and from the service providers' level data. The interviews are conducted at policy level officials and also at field level implementers of NBR while the quantitative data are based on the E-filing users and manual filing users from six different taxes zones of Bangladesh. The study areas have been selected on the basis of some rationales, like the level of E-filing, demographic profile of the taxpayers, and mostly the accessibility of the researcher to taxpayer etc. This chapter starts with reviewing the research questions and then advances with the brief description of the key findings and their relative connection with the research questions. This chapter also tries to generalize the key findings of the study and also tries to combine these findings in the theoretical relevance section of the paper. The study also looks into the practical connotations of the findings along with these theoretical implications. As a final point, it outlines the limitations of the study and suggests some possible avenues for further research.

#### 6.1 Research Questions and the Key Empirical Findings

The leading research question of the present study was *'To what extent the implementation of 'e-Filing' led to achievement of the objectives of the online return filing system?* To examine the extent of implementation, the study includes two corresponding research questions, these are: *what are the main impediments faced by the taxpayers while submitting Income Tax Return through online? What are the key factors that creating challenges in increasing the total number of online return?* The *first question* is related with the probable challenges related with the easiness of the software; and the *second question* is related with the other variables like context

of implementation, content of policy and perceived usefulness of the system that affects implementation. Based on the research questions and its theoretical responses, the study examines the extent of implementation of E-filing in the study area through empirical evidences. The analysis of the explanatory variables named '*perceived ease of use*' and '*content of policy*' answers the first research question while the analysis of '*context of implementation*' mostly helps to understand the factors that can influence the processes of E-filing.

### **6.1.1 Research Question and Key objectives of introducing E-filing at NBR**

To examine the extent of implementation elaborately, it is very much important to know the level of achieving the objectives of introducing E-filing. According to the view of interviewee the objectives are defined to bring changes mainly from three different points of view; taxpayer's point of view, service provider's point of view, governance point of view.

- The main two objectives from the taxpayer's point of view are to ease the process of income tax return filing and to ensure that taxpayer can submit their return from anywhere at any time.
- From the service providers point of view the objectives are to ensure hassle free and prompt taxpayer service; to ensure easy and fair record keeping and thus produce real time reporting; to reduce time in service delivery; to save time from some clerical job etc.
- From the governance point of view, the objectives are to ensure automated tax administration by creating paperless working environment; to bring transparency in record keeping; to reduce petty corruption etc. The ultimate goal is to increase the number of returns to mobilize the revenue. It is one of the steps of the government to achieve the goal of building '*Digital Bangladesh*'.

As the leading question of the study is about how far the level of implementation of E-filing at NBR leads to attain these objectives, so measuring the satisfaction level of the taxpayers in accessing to various e-services (e-payment, e-TIN, e-filing etc.) provided by the government is required. Clear concept about these objectives can lead to measure the level of satisfaction appropriately.

### **6.1.2 Research Question and Review: Impediments faced by the taxpayers while submitting return through online**

This corresponding research question is related with the easiness of the system and the content of policy that are affecting the extent of implementation of E-filing. To understand the dynamics of implementation, these two explanatory variables of this study play a very significant role. Firstly, the correlation coefficients among the dependent variable and four indicators about easiness of the system indicate that ease of use of the E-filing system may lead to increase the level of satisfaction of the user about the system. The perception survey among the E-filing users of the study indicates that due to have user unfriendly software, implementation of E-filing is going slow at NBR. When E-filing can help to calculate taxes easily i.e. can remove the difficulties of calculating the asset and liabilities of an income tax return of the taxpayers, then it can significantly affect the implementation of E-filing. It is observed that about 92 percent user think that the system is saving their time and money and about 85 percent users are satisfied with the helpfulness nature of the system i.e. they get their income tax clearance certificate and acknowledgement slip satisfactorily. As the users are getting expected benefit regarding these two indicators the correlation coefficient values does not show any significant result. The findings suggest that the easiness of the software can act as supporting role to implement the system. *So, by increasing the server capacity and developing user friendly software so that the E-tax web can be accessed from all browsers can boost up the implementation.*

The study reveals that the system is open for all categories of taxpayers all over the country and not mandatory to any specific group of taxpayer. So, the present implementation strategies of the system have failed to become an compulsory channel of return filing at NBR. NBR does not provide any incentives like rebate, time extension for return submission, cash benefit or others to motivate the taxpayers towards online filing which might be supportive to implement the system. The main argument in favor of this explanatory variable is about the effectiveness of the implementation strategy; and by *'making it compulsory for a specific group of taxpayer primarily'* E-filing can reach its target. The questionnaire survey among the

E-filing user also indicates that there is lacking of motivation in the existing regulations regarding incentivize the service. The provision for campaigning E-filing through print and electronic media needs to be enhanced to implement the system successfully. However, one of the main challenges of the system is the lack of online tax payment facility which is strongly related with the 'implementation' of the system. Another problem is the lack of awareness building program including training for the beneficiary group as well as for the implementers to make the system popular. This lack of policy regarding implementation strategies makes the E-filing system slow in effective implementation.

Findings regarding 'Implementation Strategies' can affix some new thoughts in the implementation of E-filing and can lead to a few policy advices for the policy makers and for the implementers. *Thus, the study reveals that just the introduction of E-filing is not enough to insert a new service delivery channel via electronic platform but the proper implementation strategies considering the context can carry an effective prospect.*

### **6.1.3. Research Question and Review: The key factors that creating challenges in increasing the total number of online return.**

The second corresponding research question is about the inquiry of the factors that are creating obstacles in increasing the total number of E-return. To understand the dynamics of the barriers, the study considers E-filing user as well as manual filing user as respondents. Among the manual filing user 14 percent of the taxpayer tried to use the system but due to some negativity of the system, they surrendered. According to the theoretical arguments and observed findings drawn from both level of respondents, the study draws that '*lack of awareness among taxpayers*', '*lack of promotional activities*', '*lack of tax payment facilities*' are the most influential factors which are creating obstacles towards implementation of E-filing. To explore the statistical trends, the study uses the 'descriptive statistics' tools of SPSS. '*Lack of awareness among the taxpayers*' is identified as the most affecting obstacles containing mean value 4.85, 4.74 respectively from E-filing user level data and from manual filing user level data. This finding indicates that there is high level of

influence of this impediment to successful implementation of E-filing. The second highest explanatory power among the ten different explanatory indicators is the *'lack of promotional activities'* for the study. Data gathered at the manual filing user level, indicate that most of the explanatory indicators have power to resist the implementation of online filing. Though the study assumes that there might be higher level of resistances from staff level officials but the data shows a different scenario.

On the other hand, from the qualitative data analysis it appears that most of the officials of income tax department have not used the system yet. The officials including lower level staff are not efficient in giving services to the user and they are not motivated at all. But the implementers think that the job performance and productivity of the of the officials will increase through the successful implementation of E-filing as system will reduce the workload of the officials and officers can concentrate on many intellectual issues rather than doing some clerical task like return receiving, tax clearance certificate distribution etc. Data also indicates that E-filing will save lots of paper work and will do arithmetic calculations of its own, so officer shall be able to focus on many supervising activities to mobilize revenue from taxpayers. The study also demonstrates that E-filing can help to reduce certain types of corruption like: petty corruption by inserting new service delivery channel through the electronic platform. This alteration of the service delivery system can also bring transparency to the governance. *Thus, the study indicate that only introduction of E-filing is not enough to have positive impact on job performance, the features and the maturity level of E-filing also have a very important role to have significant positive impacts on productivity of the officials.*

## **6.2 Actors involved with E-filing and their Role in the Policy Process**

The implementation of any policy is highly dependent on the willingness of the actors involved with the process (Knill & Tosun, Public Policy: A New Introduction, 2012, p. 151). In case of introducing E-filing system at NBR, the minister of finance, chairman of NBR and member, tax information management and sheba, were the most influential actors. The empirical data shows that, firstly member, NBR has the most influential role in implementation of online return filing as a monitoring

authority of it, and then the zonal commissioners can act as influential actors with the help of support center of E-filing. During survey one of the respondent opine that *"all income tax officials should use the system and NBR should be determined that they want to make it happen."* This finding indicates that willingness to implement the system among the service providers is very much important. During the introductory stage the implementers are providing support to the taxpayer with the help of a bunch of well trained programmers but in future when the system will run in a full speed then more training and infrastructure will be needed.

According to the Integrated Implementation Model, beneficiaries of public policies, i.e. taxpayers can also play an important role on the effects of the policy and also in affecting the behavioral changes of the implementers through positive or negative actions in co-producing public services (Winter and Nielsen, 2008 cited in Winter, 2012, p. 260). If the beneficiaries have the lacking of willingness to use it then the implementation will not successful.

*So, it is perceived that the role of those actors for developing and implementing E-filing system at NBR have to be increased. Proper implementation strategies like ample publicity, disseminate IT knowledge about E-filing through training, workshop among the user may enhance the implementation.*

### **6.2.1 Legal and Institutional Arrangement: how far is it conducive for the development and deployment of E-filing**

The study finds that to achieve the goal of Vision 2021, the government of Bangladesh commenced E-filing of income tax return in 2016 and before commencing online filing government made necessary legal and institutional arrangements. The NBR amended the policy regarding return submission under section 75 (4) of IT Ordinance, 1984 about 'return of income' and made E-filing authorized. Regarding institutional arrangements, the government of Bangladesh is handling the system through the Information and Communication Technology Division of the government of Bangladesh centrally which is responsible for managing the national policy issues relating to the digital economy and monitoring the ICT development projects. Subsequently, NBR has member (tax information

management and sheba) unit which is responsible to monitor the entire E-filing system.

Now, all Circle offices have got local internet service connected with Data Center to manage taxation administration tasks. Tax officers and staff have been trained on online filing system to manage their tasks in efficient way. At present, all the tax circle offices are functioning as Tax Service Center. Under the SGMP project, a support center has been formed to provide instant solution regarding online filing of income tax return through email and phone call.

*As per the empirical data, it can be stated that the legal and institutional arrangements taken by government can contribute to deploy E-filing at the very preliminary stage of implementation. Further modification as per necessity can add momentum in the implementation of E-filing of income tax return.*

### **6.3 Contrasting the Taxpayers and the Implementers Findings: Looking through each other Lenses**

The key objectives of the study are to examine the extent of implementation of E-filing and to find out the probable challenges of the existing system of E-filing of income tax return at NBR, Bangladesh. To understand the extent of implementation of E-filing, the study selects respondents mainly from the taxpayer group who already used the system and who are directly related with the implementation of the system. Furthermore, to find out the major challenges of the system, the study collects data from those respondents who are capable to use the system but did not use yet or tried to use but failed. Based on the statistical analysis of surveyed data, the probable influences of the independent variables over the dependent variable have been determined. The statistical analyses indicate the trends between explanatory variables and implementation of E-filing and also express the possible explanations of those trends. However, this section of the study is an effort to combine the data collected from users and service providers to increase the analytical robustness of the study.

The empirical findings from the E-filing user level data indicate that there is strong correlation with the easiness of the system and satisfaction of the user. The service providers were asked about the easiness of the system and they agreed that the

system is not so user friendly. They also opine that by making it as a compulsory channel for the service delivery, E-filing can achieve its objectives.

Mere introduction of E-filing is not sufficient to achieve the vision of paperless NBR. From the surveyed data, it appears that partial implementation of E-filing may not be able to increase the job performance and productivity of the officials.

Furthermore, lack of awareness among the taxpayers, lack of promotional activities and lack of online payment facilities can act as the hindrances to enhance the level of implementation mostly.

However, data also explains that E-filing can be act as an effective tool for reducing certain patterns of corruption like petty corruption done by the street level implementers. Through the shifting of the service delivery channel, E-filing can confirm its effectiveness on the reduction of petty corruption.

#### **6.4 Theoretical Relevance of the Study**

From the implementation incidences of the study, two main variables can be found which are strongly related with the extent of implementation of E-filing at the very primary stage of implementation. In one side, there are some factors which lie on 'perceived ease of use' of the system and another variable is about 'the context of implementation' of online filing. These variables can be measured through a number of indicators. Every indicator has the power to change the level of implementation. That means, the study reveals that the implementation of E-filing at NBR mainly depends on the variation between these two main explanatory variables.

On the other hand, 'content of policy' is measured through the implementation strategies that are defined during policy formulation. The empirical data of the study affirms that implementation strategies may have positively significant impacts on some of the patterns of implementation and at the same time it may opens a new opportunity for new taxpayers. The study also states that offering some extra incentives can act as an effective tool to implement the system. 'Perceived usefulness' measured through the indicators like *increasing the productivity and job performance of the official*. Surveyed data demands that paperless job which is



dreamt through online filing surely boost up the job performance and productivity of the official. With the increases of implementer's motivation in using the system, the implementation increases.

**Table 32: Patterns of Influence of the Independent Variables on Implementation**

Elements	Patterns of Influence
Perceived Ease of Use	<ul style="list-style-type: none"> <li>▪ Introduction of E-filing is providing smooth and hassle free taxpayer Service</li> <li>▪ E-filing is saving time and money of the taxpayer</li> </ul>
Context of Implementation	<ul style="list-style-type: none"> <li>▪ Challenging factors like lack of awareness among the taxpayer are creating hindrance in increasing the number of E-return.</li> <li>▪ <i>As there is a lacking of promotional activities</i>, so all of technologically sound taxpayers are not fully aware about the system. Promotional activities like training, workshop etc. can accelerate E-filing.</li> <li>▪ <i>There is lacking of tax payment facilities</i> in the existing system, so one need to go bank to pay taxes.</li> </ul>
Content of Policy	<ul style="list-style-type: none"> <li>▪ Proper implementation strategies by means of incentive declaration, allowing extra time for online submission etc. can boost up implementation.</li> </ul>
Perceived Usefulness	<ul style="list-style-type: none"> <li>▪ E-filing can enhance the monitoring or the oversight capacity of the officials that will have a significant influence on intention to use E-filing and thus performance expectancy affects implementation.</li> </ul>
Taxpayers Demography	<ul style="list-style-type: none"> <li>▪ As young and educated people mostly confined to service holder category are more prone to use E-filing, so training, workshop etc. can be arranged in the public and private offices to expedite the facility.</li> </ul>

#### 6.4.1 Addressing the Research Gap of the Study

The research gaps that this study covers are basically related to the obstacles that creating hindrances to successful implementation of E-filing. The resistances towards effective implementation of E-filing are ranked based on the perception collected through the study. The findings show that '*lack of awareness among taxpayers*' has the greatest influence on implementation of E-filing at NBR. At the same time, the level of resistances from staff level officials and from beneficiaries of E-filing including mediator group is also brought into light. The study also finds out that

performance expectancy has a great effect in increasing the intention to use E-filing. Although there are literatures on policy implementation but very limited researches in E-filing of income tax return in the context of Bangladesh. Thus this study is very relevant in adding to literature on taxation in Bangladesh.

### **6.5 Policy Implications of the Findings: Lessons Learnt and Measures to Successful Implementation**

The findings of the research can affix some new insights in the implementation of E-filing and can lead to a few policy advices for the policy makers as well as for the implementers. The study empirically scrutinizes the argument that ease of use of E-filing system is positively associated with the satisfaction of the taxpayer about online return filing. These findings can be a significant tool in upgrading the system as the questionnaire survey among the first hand user provides the supportive evidences in favor of the argument. Implementation strategies that are taken in the stage of policy formulation have a role in implementation of E-filing. The findings about the implementation strategies indicate that when E-filing can become a compulsory platform for a specific group of taxpayer, then it can affect in increasing the number of return through E-filing which can help to implement the service. Another important insight appears from the findings that E-filing can enhance the productivity and job performance of the tax officials that will have a significant influence on intention to use E-filing and thus performance expectancy affects implementation. Evidences collected from the both levels of respondents demonstrate that target group behavior is strongly associated with implementation of E-filing. Importantly, lack of awareness among the taxpayer and low competence level of them may make the efforts of E-filing ineffective. So various challenges of implementation like: 'lack of awareness among taxpayers', 'lack of promotional activities', 'lack of training to the officials', 'limited access of the citizen to the ICT facilities', and 'limited facilities of the online payment services' can also affect the processes of implementation. To address these challenges is an effective measure to successful implementation of E-filing.

### **6.5.1 Suggestions/Recommendations for successful Implementation of E-filing**

After analyzing the data collected through an open ended question from the user level, the study came up with some recommendations to successful implementation of E-filing. These will have a big effect on the implementation as the study collects the suggestions mostly from the first hand user of the system and cross checks with the key informant of the research. Some adjustments have been made during consultation with the key informant. The recommendations are:

- NBR must be determined that it really want to be digitalized. All officers of Income Tax Department should use this system and submitting their own return through this software.
- There should be enough trained and IT compatible mid-level/higher mid-level officials to understand trouble/obstacle/problem and plan proper troubleshooting/upgrading of the software.
- User level training can be arranged in different corporate houses, public offices, private organizations, etc. by NBR to propagate the usefulness of the system. Then, follow up the success rate of E-filing by the said office.
- Need lots of training for ITP and income tax lawyers about E-filing.
- Making E-filing compulsory for a specific group of taxpayer with a distinct amount of income primarily.
- Ensuring some incentives like rebate, additional time for return submission etc.
- Providing an additional support and advantage by giving an identity card. The advantages may be: giving priority while filling fuel, medical services, advantage when go to BRTC, BTRC, land office, high court, etc., advantage in local transport, advantage in road toll plaza, etc.
- Make the interface easier and attractive by inserting graphics. Add online payment system including mobile banking.
- Increasing the server capacity. Simplified, modern web based system software should be introduced so that the E-tax web can be accessed from all browsers.
- To go through all the pages which are not required for somebody is acting as a discouraging factor. So, a system of checkboxes can be inserted where an option will appear to the user to know his category and then a tailor made form will appear.
- The uploading limit of supporting documents should be increased and the capacity to verify the fake documents should also be increased.

- Provide better manuals for filing return. Make the system capable for uploading partial return information throughout the year and computing the remaining documents.
- Large scale campaign through print and electronic media is needed.
- Tutorial videos can be uploaded to you tube so that people can solve problem by themselves.
- Service booth in multiple areas in city and all over the country can be set.

### **6.6 Limitations of the Study and the Future Scopes**

The present study is conducted through document analysis, questionnaire survey and interview. The other methods like FGD and direct observation may add value in data collection. The sample size (N) is kept small due to time constraint which is a major challenge to check the reliability of the present findings. Furthermore, a small deviation of the opinions may carry a significant impact on measurement of the respective variables. Further study on this issue with a larger sample can be conducted to produce more valid findings. The present study mostly considers the view of service holder and survey is conducted to highly educated and technologically sound person to understand the probable variation on implementation of E-filing but other variations like heads of income, amount of assets, amount of expenditure etc. can produce more interesting insights and deeper findings on the implementation dynamics of E-filing. Therefore, the present study has left many questions and areas unexplored which can be brought into play by the future researchers.

### **6.7 Concluding Remarks**

The findings of the study depict the extent of implementation of E-filing with some observations and challenges. The dynamics that are emerged from the study can offer some understandings about the aspects of the independent variables that may have larger impacts on implementation and it also provide some insights to explain the factors that creates hindrance to the successful implementation of E-filing at NBR. From the survey area, it appears that '*ease of use*' may have better impacts when it can make the system more users friendly. In addition, by reducing compliance cost for the taxpayer through reducing unnecessary paper works and

contacts between tax administration and taxpayers, the system can achieve popularity. The performance expectancy of the officials can also affect the implementation of E-filing as it can enhance the intention to use the system among the implementers.

Ultimately, the success of any technology based government service like E-filing program lies in how efficiently it can enhance people's participation in government functioning through ease of use. It shows that just the introduction of E-filing is not sufficient to achieve the goal of digitization of Bangladesh lied in '**Vision 2021**' but to implement the system successfully can provide greater impacts on entire governance. Surely, it is a good start but the government should emphasize on its implementation strategy for enhancing direct tax collection. As revenue is known as the blood for development so this type of initiatives can accelerate the growth of revenue that can lead to reach the goal of '**Vision 2041**' to be a developed nation.

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## Appendixes

### Appendix 1: Research Design at a Glance

Independent variables	Measuring Indicators	Operational Definitions	Source of Data	Dependent variables	Measuring Indicators	Operational Definitions	Source of Data
Content of Policy	<ul style="list-style-type: none"> <li>- Strategies to Implement (Ensuring incentives like rebate, time extension, promotional activities etc.)</li> <li>- Extent of Change Envisioned</li> </ul>	The core components of the policy and implementation strategies that are clearly stated or available within the policy or project can play a vital role in implementation of any system.	<p>Questionnaire Survey among the taxpayers of selected taxes zones of Bangladesh</p> <p style="text-align: center;"><b>and</b></p> <p>Conducting Interview among the policy level officials</p>	Extent of Implementation of E-filing	<ul style="list-style-type: none"> <li>- Satisfaction of the taxpayers in accessing to various services</li> <li>- Satisfaction of the service providers</li> </ul>	The ' <i>extent of implementation</i> ' means the degree/dimensions of implementation at NBR. Satisfaction of the service provider has been assessed in terms of increasing job performance and productivity of the public officials while satisfaction of user is based on ease of use and the other implementing factors associated with it. Satisfaction of the taxpayer also includes the level of trust about E-filing system among the user.	<p>Questionnaire Survey among the taxpayers of selected taxes zones of Bangladesh</p> <p style="text-align: center;"><b>and</b></p> <p>Conducting Interview among the policy level officials and field level implementers</p>
Context of Implementation	<ul style="list-style-type: none"> <li>- Competence and Support in the Bureaucracy</li> <li>- Compliance and Responsiveness of Beneficiaries</li> <li>- Resistance and Conflicts within the officials</li> </ul>	The context or the environment of the administration in which the program implemented is the most important implementing factor. For successful implementation of E-filing compliance and responsiveness of intended beneficiaries including income tax practitioners are very important.	Questionnaire Survey among the taxpayers of selected taxes zones of Bangladesh				
Perceived usefulness	<ul style="list-style-type: none"> <li>- Increasing Productivity</li> <li>- Increasing Job Performance</li> </ul>	Perceived usefulness is the degree to which a person believes that using a particular system would enhance his/her job performance.	Conducting Interview among the policy level officials and field level implementers				
Perceived Ease of Use	<ul style="list-style-type: none"> <li>- Finding it easy to Operate the system</li> <li>- Finding it easy to - Calculate Taxes</li> <li>- Time savvy</li> </ul>	It refers to the degree to which a person believes that using a particular system would be free of effort. If an application is perceived as easier to use than another, then it is more likely to be accepted by users.	Questionnaire Survey among the taxpayers of selected taxes zones of Bangladesh				

## Appendix 2: Target Population and the Sample Size for Questionnaire Survey

Study Location	Categories of Respondents	Occupational Status	Number of Respondents
Taxes Zone-4, Dhaka	Taxpayers (Online User)	Public Service Holders	6
	Individual Taxpayers (Manual filing User)	Public Service Holders (Retired and Existing)	4
	Income Tax Practitioners/lawyers (Manual filing User)	Private Service Holders	2
Taxes Zone-6, Dhaka	Taxpayers (Online User)	Private Service Holders (Banker)	6
	Individual Taxpayers (Manual filing User)	Private Service Holders (Banker)	4
	Income Tax Practitioners/lawyers (Manual filing User)	Private Service Holders	2
Taxes Zone-11, Dhaka	Taxpayers (Online User)	Teachers (Private and Public Universities and Colleges)	6
	Individual Taxpayers (Manual filing User)/ Teacher of different private and public universities	Teachers (Private and Public Universities and Colleges)	4
	Income Tax Practitioners/lawyers (Manual filing User)	Private Service Holders	2
Taxes Zone-13, Dhaka	Taxpayers (Online User)	Private Service Holders (Telecom-GP and KAFCO)	6
	Individual Taxpayers (Manual filing User)	Private Service Holders (Telecom-GP)	4
	Income Tax Practitioners/lawyers (Manual filing User)	Private Service Holders	2
Taxes Zone-4, Chittagong	Taxpayers (Online User)	Public Service Holders posted in Chittagong	6
	Individual Taxpayers (Manual filing User)/ Public Service holders posted in Chittagong	Public Service Holders posted in Chittagong	4
	Income Tax Practitioners/lawyers (Manual filing User)	Private Service Holders	2
Large Tax Payers Unit (LTU)	Taxpayers (Online User)	0	0
	Individual Taxpayers (Manual filing User)	Bankers and other Corporate officials	6
	Income Tax Practitioners/lawyers (Manual filing User)	Private Service Holders	4
<b>Number of total Respondents of Quantitative Study: 70</b>			

### **Appendix 3: Details about Respondents for Interview**

<b>Respondents group</b>	<b>Type of Respondents</b>	<b>Sample size</b>
1.	Key informants (Skilled IT Personnel involved with E-filing)	1
2.	Existing Member of NBR (grade-1)	1
3.	Commissioners of Taxes from Study Locations (grade-3)	1
4.	First Secretary(grade-4), Tax Policy, NBR	1
5.	Additional Commissioners of Taxes from Study Locations (Supervising authority)	1
6.	Deputy Commissioners of Taxes from Study Locations (Circle officer)	4
7.	Assistant Commissioners of Taxes from Study Locations (Circle officer)	1
<b>Total number of Respondents for Qualitative Interview: 10</b>		

#### Appendix 4: Interview Guide for the Policy Makers or Key Informants

### **Interview Guide for Policy Makers/Key Informants A Study on Income Tax Payers Perception towards E-filing**

**Objective:** The objective of the study is to understand the status of implementation of E-filing of income tax return and to find out the challenges of E-filing in Bangladesh. The study is being undertaken for fulfillment of the requirement of the thesis of Master in Public Policy and Governance under Public Policy and Governance (PPG) Program, North South University, Bangladesh.

**Note:**

- ❖ Data collected through this Interview Guide will be used for research purpose only and personal identity of the respondents will not be disclosed. So, I am humbly seeking your kind cooperation to help the research work by providing the valuable information.
- ❖ There is no right or wrong answers; we want to hear your own personal views.
- ❖ Please tick wherever applicable.

1. General Information of the Respondent:

- a. Age:
- b. Education:
- c. Office Address:
- d. Position (if any):
- e. Email Address:
- f. Date of interview:

2. For how long have you been involved with E-filing system?

3. What are the key objectives of introducing E-filing of income tax return at NBR?

4. (a) In your opinion, what could be the potential outcome of E-filing system?

(b) Do you think that online filing will increase the job performance and productivity of the officials? If yes, then how does it will increase?

5. Do you think that the objectives of introducing E-filing at NBR have been met?

- a. Yes
- b. No
- c. Partially agree
- d. Don't know/no comment



6. If no, what could be done? Please state your suggestions.

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7. Who were the most influential actors for introducing E-filing system at NBR, Bangladesh?

8. In your opinion, who are the most influential actors for implementing E-filing?

9. (a) How do you perceive the role of those actors for developing and implementing E-filing system at NBR?

(b) Are they able to provide proper support to the taxpayers regarding E-filing?

10. In your opinion, what are the most important issues/factors for implementation of E-filing?

Contents	Put a (v) mark					
	Very unimportant (1)	Unimportant (2)	Neutral (3)	Fairly important(4)	important (5)	Very important (6)
Strategic/Action plan of Implementation						
Strong support from political leader						
Internal Leadership						
IT Expertise (organizational and individual)						
Organizational Culture						
Finance						
Incentives like rebate, time extension etc.						
Others (please specify)						

11. What are the main **obstacles/barriers** to the successful implementation of E-filing?

12. Are the stakeholders ready to use the system?

13. Do you think that the existing software and website are user friendly?

14. Do you think that the existing tax payment facilities through the system are sufficient?

15. Please state your level of satisfaction about the current implementation status of E-filing?

Put a (v) mark					
Very unsatisfactory (1)	Unsatisfactory (2)	Neither satisfactory nor unsatisfactory (3)	Nearly satisfactory (4)	Quite satisfactory (5)	Very satisfactory (6)

16. Do you think that existing policies, statutes and regulations are sufficient to promote the system in Bangladesh?

- a. Yes    b. No  
c. Partially Agree                          d. Don't know/ no comment

17. If not sufficient then what changes are required in the policies, statutes and regulations?

18. In your opinion, what is the necessary pre-requisite for the successful implementation of E-filing?

19. Many people think that “E-filing can reduce petty corruption and mismanagement in the tax offices”. To what extent do you agree with the statement? Please scale it from your experience:

put a (v) mark				
Cannot reduce (1)	Neither reduce nor increase (2)	Can slightly reduce (3)	Can fairly reduce (4)	Can drastically reduce (5)

20. Please kindly state your other Comments/ Suggestions, if any?

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**Appendix 5: Interview Guide for the Policy Implementers or Service Providers**

**Interview Guide for Policy Implementers/Service Providers  
A Study on Income Tax Payers Perception towards E-filing**

**Objective:** The objective of the study is to understand the status of implementation of E-filing of income tax return and to find out the challenges of E-filing in Bangladesh. The study is being undertaken for fulfillment of the requirement of the thesis of Master in Public Policy and Governance under Public Policy and Governance (PPG) Program, North South University, Bangladesh.

**Note:**

- ❖ Data collected through this Interview Guide will be used for research purpose only and personal identity of the respondents will not be disclosed. So, I am humbly seeking your kind cooperation to help the research work by providing the valuable information.
- ❖ There is no right or wrong answers; we want to hear your own personal views.
- ❖ Please tick wherever applicable.

1. General Information of the Respondent:

- a. Age:
- b. Education:
- c. Office Address:
- d. Position (if any):
- e. Email Address:
- f. Date of interview:

2. For how long have you been involved with E-filing system?

3. What are the key objectives of introducing E-filing of income tax return at NBR?

4. (a) In your opinion, what could be the potential outcome of E-filing system?

(b) Do you think that online filing will increase the job performance and productivity of the officials? If yes, then does how it will increase?

5. Do you think that the objectives of introducing E-filing at NBR have been met?

- a. Yes
- b. No
- c. Partially agree
- d. Don't know/no comment

6. If no, what could be done? Please state your suggestions.

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7. In your opinion, who are the most influential actors for implementing E-filing?

8. In your opinion, what are the most important issues/factors for implementation of E-filing?

Contents	Put a (v) mark					
	Very unimportant (1)	Unimportant (2)	Neutral (3)	Fairly important(4)	important (5)	Very important (6)
Strategic/Action plan of Implementation						
Strong support from political leader						
Internal Leadership						
IT Expertise (organizational and individual)						
Organizational Culture						
Finance						
Incentives like rebate, time extension etc.						
Others (please specify)						

9. What are the main **obstacles/barriers** to the successful implementation of E-filing?

10. Are the stakeholders ready to use the system?

11. Do you think that the existing software and website are user friendly?

12. Do you think that the existing tax payment facilities through the system are sufficient?

13. Please state your level of satisfaction about the current implementation status of E-filing?

Put a (v) mark					
Very unsatisfactory (1)	Unsatisfactory (2)	Neither satisfactory nor unsatisfactory (3)	Nearly satisfactory (4)	Quite satisfactory (5)	Very satisfactory (6)

14. Do you think that existing policies, statutes and regulations are sufficient to promote the system in Bangladesh?

- a. Yes  
 b. No  
 c. Partially Agree  
 d. Don't know/ no comment

15. If not sufficient then what changes are required in the policies, statutes and regulations?

16. In your opinion, what is the necessary pre-requisite for the successful implementation of E-filing?

17. Many people think that "E-filing can reduce petty corruption and mismanagement in the tax offices". To what extent do you agree with the statement? Please scale it from your experience:

put a (v) mark				
Cannot reduce (1)	Neither reduce nor increase (2)	Can slightly reduce (3)	Can fairly reduce (4)	Can drastically reduce (5)

18. Please kindly state your other Comments/ Suggestions, if any?

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## Appendix 6: Questionnaire for Taxpayer (E- filing user)

### **Questionnaire for Taxpayer (E-filing user)** **A Study on Income Tax Payers Perception towards E-filing**

**Objective:** *The objective of the questionnaire is to understand the status of implementation of E-filing of income tax return and to find out the challenges of E-filing in Bangladesh. The study is being undertaken for fulfillment of the requirement of the thesis of Master in Public Policy and Governance under Public Policy and Governance (PPG) Program, North South University, Bangladesh.*

**Note:**

- ❖ Data collected through this questionnaire will be used for research purpose only and personal identity of the respondents will not be disclosed. So, I am humbly seeking your kind cooperation to help the research work by providing the valuable information.
- ❖ There is no right or wrong answers; we want to hear your own personal views.
- ❖ Please tick wherever applicable.

#### **Part A: Socio-economic background of the respondent**

1. Gender:

Code	Gender	Put a (v) mark
1	Male	
2	Female	

2. Status of the Tax Payer

Code	Status	Put a (v) mark
1	Individual Tax Payer(Self)	
2	Representatives of Firm, Company or Others (ITP or Lawyer)	

3. Age:

Code	Age Range	Put a (v) mark
1	21-30	
2	31-40	
3	41-50	
4	51-above	

4. Education:

Code	Education Level	Put a (v) mark
1	Illiterate or Primary level	
2	Secondary level (S.S.C passed)	
3	Higher secondary level (H.S.C passed)	
4	Graduate degree	
5	Master's degree or higher	

5. Occupation:

Code	Occupational Status	Put a (v) mark
1	Service Holder a. Public Service (Please mention service details) b. Private Service (Please mention service details)	
2	Self-employed/Professional	
3	Business	
4	House Wife	
5	Others (Please mention)	

6. Under which Taxes Zone do you submit your income tax return?

Ans:.....

**Part B: Satisfaction about E-filing System**

7. Have you heard about E-filing of income tax return?

1. Yes
2. No

8. If yes, have you used the system?

1. Yes
2. No

9. If yes, why do you prefer online return filing system to manual system?

1. To save time
2. To get clearance certificate within a couple of minutes
3. Others (please mention).....  
.....

10. How long are you using E-filing software?

Code	Year	Put a (v) mark
1	One	
2	Two	

11. Please state your **satisfaction level** for submitting returns through E-filing:

Put a (v) mark					
Very unsatisfactory (1)	Unsatisfactory (2)	Neither satisfactory nor unsatisfactory (3)	Nearly satisfactory (4)	Quite satisfactory (5)	Very satisfactory (6)

12. Please state your **level of trust** on software for submitting returns through E-filing:

Put a (v) mark					
Very untrustworthy (1)	Not trustworthy (2)	Neither trustworthy nor untrustworthy (3)	Nearly trustworthy (4)	Quite trustworthy (5)	Very trustworthy (6)



### Part C: About the content of E-filing System

13. Please rate the following observation related to E-filing services on 1-6 point scale (1 being least and 6 being most) based on your experience.

Contents	Put a (v) mark						
	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Fairly agree (4)	Agree (5)	Strongly agree (6)	Don't know
User friendly system (easy to use and find the way around on E-filing website)							
Able to calculate your taxes easily through E-filing							
Enable to get precise and up-to-date information like circular, SRO etc. when needed							
E-filing services save your time and money							
E-filing services protect your privacy when using it							
Helpfulness (receive acknowledgement slip, tax clearance certificate, wealth statement etc. when you needed)							

14. How did you get motivation for submitting return through E-filing? (Multiple options can be chosen)

Code	Source of Information	Put a (v) mark
1	Newspaper	
2	Electronic media	
3	Service Providers	
4	Social Media	
5	Friend/Relative/Colleague	
6	Income Tax Lawyer/ITP	
7	Others, (Please mention)	

**Part D: About the context of Implementation of E-filing System**

15. Are you aware about complaint lodging system?

1. Yes
2. No

16. (a) When you face any problem regarding E-filing do you lodge any complain with the concerned desk?

1. Yes
2. No

16. (b) If “Yes” what was the outcome?

1. Yes I got the service
2. I didn't get he service
3. Don't know

17. In your opinion, how have the business community/tax payers responded to this service?

1. Positively
2. Negatively
3. Not sure

18. Please rate the following statements identified as obstacles relating to E-filing services on 1-6 point scale (1 being least and 6 being most).

Contents	Put a (√) mark					
	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Fairly agree (4)	Agree (5)	Strongly agree (6)
The existing software and website are not user friendly						
There are resistances from staff level officials						
The system is not safe and sound						
There is lacking of awareness among taxpayers						
There is lacking of competence among service providers						
There are obstacles arising from the mediator group like Tax Lawyer, ITP (Income Tax Practitioners)						
There is lacking of promotional activities						
Resource constraints						
Low speed of Internet						
Lack of online tax payment facility						

19. Besides the above mentioned obstacles, what are the challenges/ resistances that affect effective implementation of E-filing system at NBR? Please give your opinion based on experiences.

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20. What are your suggestions/recommendations for successful implementation of E-filing of income tax return in Bangladesh? (Please put a (v) mark, multiple answers can be given)

1. Making it compulsory for a specific group of taxpayer primarily.
2. Ensuring some incentives like rebate, time extension for return submission etc.
3. Others(Plz.Mention).....  
 .....  
 .....

21. Many people think that “E-filing can reduce petty corruption and mismanagement in the tax offices”. To what extent do you agree with the statement? Please scale it from your experience:

put a (v) mark				
Cannot reduce (1)	Neither reduce nor increase (2)	Can slightly reduce (3)	Can fairly reduce (4)	Can drastically reduce (5)

22. Are you willing to submit your next return through online?

1. Yes
2. No
3. Not sure

**Thank you very much for your kind cooperation.**

## Appendix 7: Questionnaire for Taxpayer (Manual filing user)

### **Questionnaire for Taxpayer (Manual filing user)** **A Study on Income Tax Payers Perception towards E-filing**

**Objective:** The objective of the questionnaire is to understand the status of implementation of E-filing of income tax return and to find out the challenges of E-filing in Bangladesh. The study is being undertaken for fulfillment of the requirement of the thesis of Master in Public Policy and Governance under Public Policy and Governance (PPG) Program, North South University, Bangladesh.

**Note:**

- ❖ Data collected through this questionnaire will be used for research purpose only and personal identity of the respondents will not be disclosed. So, I am humbly seeking your kind cooperation to help the research work by providing the valuable information.
- ❖ There is no right or wrong answers; we want to hear your own personal views.
- ❖ Please tick wherever applicable.

#### **Part A: Socio-economic background of the respondent**

1. Gender:

Code	Gender	Put a (v) mark
1	Male	
2	Female	

2. Status of the Tax Payer

Code	Status	Put a (v) mark
1	Individual Tax Payer(Self)	
2	Representatives of Firm, Company or Others (ITP or Lawyer)	

3. Age:

Code	Age Range	Put a (v) mark
1	21-30	
2	31-40	
3	41-50	
4	51-above	

4. Education:

Code	Education Level	Put a (√) mark
1	Illiterate or Primary level	
2	Secondary level (S.S.C passed)	
3	Higher secondary level (H.S.C passed)	
4	Graduate degree	
5	Master's degree or higher	

5. Occupation:

Code	Occupational Status	Put a (√) mark
1	Service Holder a. Public Service (Please mention service details) b. Private Service (Please mention service details)	
2	Self-employed/Professional	
3	Business	
4	House Wife	
5	Others (Please mention)	

6. Under which Taxes Zone do you submit your income tax return?

Ans:.....

**Part B: Satisfaction about income tax return filing system**

7. Are you happy to pay taxes?

1. Yes
2. No

8. How long are you filing income tax return?

Ans: .....year/years.

9. Do you have computer at home/office?

1. Yes
2. No

10. Do you have internet access at your home/office?

1. Yes
2. No

11. How would you state your competence level of using ICT (Information and Communication Technology)?

Put a (v) mark					
Very bad (1)	Bad (2)	Neither good nor bad (3)	Almost good (4)	Fairly good (5)	Very good (6)

12. Do you know NBR (National Board of Revenue) has introduced E-filing of income tax return besides manual filing?

1. Yes
2. No

13. If yes, from which source have you learnt about the E-filing system? (Multiple options can be chosen)

Code	Source of Information	Put a (v) mark
1	Newspaper	
2	Electronic media	
3	Service Providers	
4	Social Media	
5	Friend/Relative/Colleague	
6	Income Tax Lawyer/ITP	
7	Others, (Please mention).....	

14. Which filing system do you feel easy to use?

1. Manual Filing
2. E-filing/Online filing

15. Why do you submit your return through manual filing system rather than online system?

- 
- 
-

16. Please state your **satisfaction level** while submitting returns through manual filing:

Put a (v) mark					
Very unsatisfactory (1)	Unsatisfactory (2)	Neither satisfactory nor unsatisfactory (3)	Nearly Satisfactory (4)	Quite Satisfactory (5)	Very Satisfactory (6)

17. Please state your **level of trust** on office management for submitting returns through manual filing:

Put a (v) mark					
Very untrustworthy (1)	Not trustworthy (2)	Neither trustworthy nor untrustworthy (3)	Nearly trustworthy (4)	Quite trustworthy (5)	Very trustworthy (6)

**Part C: About the content and context of income tax return filing system**

18. To what extent do you think the government of Bangladesh is capable of handling the E-filing system?

Put a (v) mark					
Very inefficient (1)	inefficient (2)	Neither inefficient nor efficient (3)	Quite efficient (4)	Efficient (5)	Very efficient (6)

19. When you face any problem regarding filing of your income tax return were you able to get assistance from the concerned official?

1. Yes
2. No



20. If yes, do you think in case of E-filing they can give proper assistance?

1. Yes
2. No
3. Not sure

21. In your opinion, how have the business community/tax payers responded to this service?

1. Positively
2. Negatively
3. Not sure

22. Do you think that most of the taxpayers of Bangladesh are ready to file their income tax return through online?

1. Yes
2. No

23. Please rate the following statements identified as obstacles relating to E-filing services on 1-6 point scale (1 being least and 6 being most).

Contents	Put a (✓) mark					
	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Fairly agree (4)	Agree (5)	Strongly agree (6)
The existing software and website are not user friendly						
There are resistances from staff level officials						
The system is not safe and sound						
There is lacking of awareness among taxpayers						
There is lacking of competence among service providers						
There are obstacles arising from the mediator group like Tax Lawyer, ITP (Income Tax Practitioners)						
There is lacking of promotional activities						
Resource constraints						
Low speed of Internet						
Lack of online tax payment facility						

24. Besides the above mentioned obstacles, what are the challenges/ resistances that affect effective implementation of E-filing system at NBR? Please give your own opinion based on experiences.

- 
- 
- 

25. What are your suggestions/recommendations for successful implementation of E-filing of income tax return in Bangladesh? (Please put a (v) mark, multiple answers can be given)

1. Making it compulsory for a specific group of taxpayer primarily
2. Ensuring some incentives like rebate, time extension for return submission etc.
3. Others ( Please Mention).....  
 .....  
 .....

26. “Many people think that E-filing can reduce petty corruption and mismanagement in the tax offices”. To what extent you agree with the statement? Please scale it from your experience:

put a (v) mark				
Cannot reduce (1)	Neither reduce nor increase (2)	Can slightly reduce (3)	Can fairly reduce (4)	Can drastically reduce (5)

27. Are you willing to submit your next return through online?

1. Yes
2. No
3. Not sure

**Thank you very much for your kind cooperation.**