Automation of Electronics TAX & VAT Collection

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Abstract: Smart and efficient Tax and VAT systems are now obvious need for healthy financial situation in Bangladesh. In this thesis we developed automated Taxation and VAT system through online. At first, we developed a website by which any Tax payer or VAT payer can access his/her all Tax and/or VAT information throughout the year by their TIN no.s. This website will be under NBR and Administration of VAT who will administrate, accumulate and maintain all information about Tax and VAT payment of all employed/ self-employed citizens. For this, we proposed interconnection between databases of all banks, financial organizations, small and large business and education organizations and all other kinds of organizations with database of NBR and Administration of VAT. This central database of NBR and Administration of VAT again connected with National Database which can be searched by National ID number. Any Tax and/VAT payer can check his/her financial report about gross income, total investments, total expenditure in anywhere such as shopping mall, children school, hospital etc. over a fiscal year through this specific website. For this they just use TIN no. As a result, any kind of irregularity of payment, hiding information about VAT or income or any kind of fake situation can be controlled by this automated smart system.

Index terms: e-TAX, e-VAT, NBR, TIN.

I.INTRODUCTION

The purpose of this study was to investigate which factors affect diffusion of tax return filing online (e-return) in Bangladesh. Another aim was to develop an adoption forecast for the service. Finally, customer categorization was suggested in order to enable e-return deliver more public value by accommodating the needs of different customer groups.

Diffusion of Innovations theory, Bass Diffusion Model and Service Process Analysis were used as theoretical base for the study. E-return user satisfaction survey conducted by Finnish Tax Administration was used for statistical analysis and mathematical modeling. Another comparative study was conducted with a popular business-to-customer service with similar characteristics e-billing in Bangladesh.

As a result of the study, we discovered that the diffusion of e-return is dependent on such variables as perceived attributes of e-return system, interpersonal communication channels, performance of related services, and extent of Tax Administration's promotion efforts. In addition, we classified taxpayers in four main categories based on taxpayers' demographics and personal income tax filing needs. The first category, which accounts for 60% of all population, represents those who accept tax assessment decision without making any deductions. The second category, which covers another 36% of taxpayers, consists of individuals who make few deductions. Another 2.5% of taxpayers make speculative deductions that involve consultations with friends or professionals, e.g. healthcare-related deductions. The last 1.5% is the wealthiest tax payers who use financial advisors for asset management and taxation.

Based on our analysis, we prepared recommendations for improving the e-return service in Bangladesh. The recommendations can be split into two groups: recommendations aiming at increasing the attractiveness of e-return for potential adopters (e.g. introduction of instant tax assessment feature online), and recommendations meant to discourage people from submitting tax return in paper (e.g. paper form service processing fee) [1].

Soon after the liberation war in 1971, in order to improve social and economic circumstances of newly formed Bangladesh, an increasing number of goods were brought within the realm of Excise Duty.

The VAT Act 1991 came into force from 1st July 1991, putting the Sales Tax Ordinance 1982 and Business Turnover Tax Ordinance 1982 largely out of use [2]. In Bangladesh the Consumption Variant is used in the assessment of VAT. In calculation of VAT, the Invoice Credit Method is used due to its advantages over the other methods. From the point of cross border trade or consumption Bangladesh has adopted the Destination Principle, as opposed to Origin Principle. Under destination principle, exports are supposed to be Zero Rated and imports are to be taxed.

E-Tax is the term for electronic Tax and Vat paying system which is fully automated, by used this method every tax payer or normal customer could pay their income tax or normal product or customs vat via the Internet to the NBR (National Board of Revenue) or authorized bank.

Huge benefits to use our e-tax system, if any tax payer or buyer pays their tax or vat by this method. They will receive a tax refund sooner and their taxes data goes directly to NBR computers with a greatly reduced chance of human keying or document scanning errors. E-tax system cost 20 times less to process compared to a paper return, which saves tax payer a lot of money.

The system should be used for taxpayer profiling, provide reliable online tax calculator, link with other agencies such as the NBR Customs Service, Corporate Affairs Commission and Land Registry. This will make the system truly integrated and should facilitate a risk base audit approach [3].

E-tax and e-vat will provide smooth transition, simplicity and inclusiveness, availability, accessibility, completeness and limited human interface, security and back-up plan. In our design, E-tax automatically performs, checks and calculations to help tax payer to complete taxpayer tax return correctly, and can pre-fill some of taxpayer information. Members of taxpayer household can each use the same web site to prepare and lodge their own tax returns. If tax payer is in business as a sole trader or a partner in a partnership, tax payer can use e-tax to prepare and lodge taxpayer individual tax return. However, tax payer can't use e-tax to lodge a company, trust or partnership return. Tax agents can't use e-tax.

In this paper, we propose automation of collecting tax and vat through internet. By using microchip financial card or tax card or vat card one can connect with NBR (National Board of Revenue) online database for updating every tax or vat payment in bank, shopping mall, medical bill etc. It also connects with National ID card for universal economic profile of a person.

In section II, we study some previous works on e-tax and e-vat system. Then in section III and IV, we discuss the existing tax and vat system in Bangladesh. In section V, we develop e-tax system. Section VI concludes the paper.

II. RELATED WORK

In 2011, Harold creates a system which has Computer-generated returns in America, transmitted electronically, generally is easier to process than paper returns; since the information on the forms doesn't have to be keyed in, number by number, by IRS staff into the Service's computers hence there is less chance of errors. Electronic transmittal is an instantaneous service which bypasses the frustrating vagaries of the postal system and the client receives confirmation within a day or two that the return not only was received by the IRS, but was received accurately [4]. The biggest advantage, from the taxpayer's point of view, is that it shortens the time for refunds from an average of 12 weeks to about 3 weeks. Refunds can even be deposited directly into taxpayers' bank accounts. As an added incentive, some vendors that provide electronic filing services for tax preparers also offer a service in which clients due a tax refund can apply for an immediate bank loan equal to the expected IRS check. Electronic tax filing systems are an e-government application that is being utilized with increasing frequency all over the world. This system was created by Manly in 2005 and Kun et al separately. For web-based information systems to remain useful, they must contain new, enhanced attributes. Belanger, et al. in 2006 argue that they are several success criteria for a web site depending on the variety of goals such as selling, informing and advertising. The authors further argue that web site success is audience specific and it should take account of diverse perspectives of users and owners [5]. In their research for electronic tax filing system in Taiwan, Fu, et al in 2006 extended the technology acceptance model (TAM) to include such Theory of Planned Behavior parameters as subjective norms, self-efficacy, resource facilitating conditions and technology facilitating conditions [6]. In yet another article, the same authors also compared user satisfaction with the three methods of tax filing(manual, two-dimensional barcode, web-based) in Taiwan, according to such parameters as ease of data entry, correction, operation, learning and data submission, explanation completeness, filing form neatness and total filing time. Layne and Lee propose a four stage model for e-government maturity [7]: catalogue, transaction, vertical integration and horizontal integration of systems.

III. TAX SYSTEM IN BANGLADESH

The National Board of Revenue (NBR) is the central authority for tax administration in Bangladesh. It was established by President's Order No. 76 of 1972. The main responsibility of NBR is to collect domestic revenue (primarily, Import Duties and Taxes, VAT and Income Tax) for the government. Other responsibilities include administration of all matters related to taxes, duties and other tax producing fees. Under the overall control of IRD, NBR administers the Excise, VAT, Customs and Income-Tax services consisting of 3434 officers of various grades and 10195 supporting staff positions (Approved set up as on 09 Feb., 2000 AD) [2].
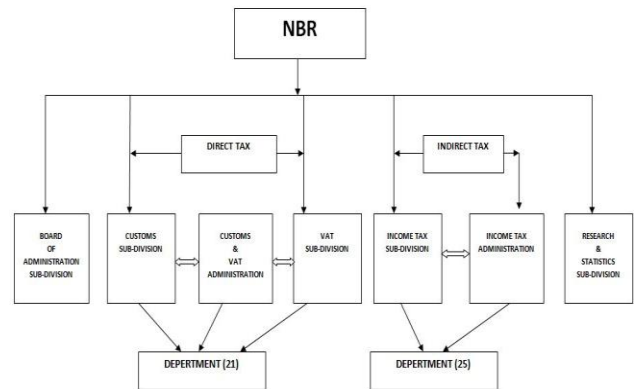

Figure 1: NBR System Diagram.

Among direct taxes, income tax is the main sources of revenue. "The more a taxpayer earns the more he should pay"- is the basic principle of charging income tax. It aims at ensuring equity and social justice [8]. For the purpose of computation of total income and charging tax thereon, sources of income can be classified into 7 categories, which are as follows[8]: salaries, interest on securities, income from house properties, agriculture, business, profession and other sources and capital gains.

A.Tax Rate (Assessment Year- 2014-15),Other Than Company:

For individuals other than female taxpayers, senior taxpayers of 65 years and above, retarded taxpayers and gazette war-wounded freedom fighter, income tax payable for the [9].

Table 1: Tax Rate for Male

First	2,20,000/-	Nill
Next	3,00,000/-	10%
Next	4,00,000/-	15%
Next	5,00,000/-	20%
Next	30,00,000/-	25%
Rest Amount		30%

For female taxpayers, senior taxpayers of age 65 years and above, income tax payable for the [9].

Table 2: Tax Rate for Female

First	2,75,000/-	Nill
Next	3,00,000/-	10%
Next	4,00,000/-	15%
Next	5,00,000/-	20%
Next	30,00,000/-	25%
Rest Amount		30%

For retarded taxpayers, tax free income threshold limit is TK. 3, 50,000/-.

For gazette war wounded freedom fighters, the threshold limit is Tk. 4, 00,000/-

Minimum tax for any individual assesse living in City Corporation area is Tk. 3,000

Minimum tax for any individual assesse living in District headquarter is Tk. 2,000

Minimum tax for any individual assesse living in any other area is Tk. 1,000 Non-resident Individual 30% (other than non-resident Bangladeshi) [9].

B. Who should submit Income Tax Return?

- If total income of any individual other than female taxpayers, senior male taxpayers of 65 years and above, retarded taxpayers and war wounded gazette freedom fighter during the income year exceeds Taka 2,20,000/-.
- If total income of any female taxpayer, senior male taxpayer of 65 years and above during the income year exceeds Taka 2, 75,000/-.
- If total income of any retarded taxpayer during the income year exceeds TK. 3, 50,000.
- If total income of any gazette war-wounded freedom fighter taxpayer during the income year exceeds Tk. 4, 00.000/-.
- If any person was assessed for tax during any of the 3 years immediately preceding the income year.
- A person who lives in any city corporation/paurashava/divisional HQ/district HQ and owns motor car/owns membership of a club registered under VAT Law.
- If any person runs a business or profession having trade license and operates a bank account.
- Any professional registered as a doctor, lawyer, and income tax practitioner, Chartered Accountant, Cost & Management Accountant, Engineer, Architect and Surveyor etc.
- Member of a Chamber of Commerce and Industries or a trade Association. Any person who participates in a tender.
- Candidate for Paurashava, City Corporation or Parliament elections.
- Any company registered under the Company Act, 1913 or 1994.
- Any Non-government organization (NGO) registered with NGO Affairs Bureau [9].

C. Limitations of our Tax System

- Our present tax paying system is not fully automated, and not possible for our finance department to handling

economic condition of all factory, business man and small government and private employee.

- There is some legal tax payer in our country they pay their all kinds of duty vat and all kinds of income tax but have no government award for them it's a one kind of same for our government.
- Now a day a lot of big shopping mall is established in our country like Jamuna Future Park, Bashundhara city also have same mega shop like Meena Bazar, Agora, Swapno etc. Every day `a huge amount of money transition and a lot of vat deduct from costumer's account, but some dishonest person uses this money in illegal way. In this case we lost our revenue day by day.

IV. VAT SYSTEM IN BANGLADESH

VAT is usually levied on goods and services at the rate of 15% of the value of goods imported and supplied within Bangladesh and the services provided within Bangladesh. Certain goods (mentioned in the First Schedule to the Act) are, however, exempt from payment of VAT. Similarly, there are a number of services mentioned in the Second Schedule to the Act which are exempt from VAT. Registration for importers, exporters, suppliers, traders and service providers whose annual turnover exceeds Tk 20, 00,000.00 each is compulsory. Others may have optional registration. However, exemption from registration may be granted by the government on certain terms and conditions. VAT is collected by the Customs, Excise and VAT authorities. The appraisers of Custom Houses and the inspectors of land custom and airport customs propose the assessment of VAT, together with custom duty. The assessments are required to be approved by the Principal Appraisers at the custom houses and by the Superintendents in the land and air custom offices. VAT is computed on the basis of assessable value (also known as custom value or landing cost) in the case of imported goods and on the basis of value of turnover in the case of goods and services manufactured/produced or provided within Bangladesh. The basis for computation of assessable value in the case of imported goods has recently been changed. Value for the purpose of levying Custom Duty and VAT is now taken to be the value certified by the pre-shipment inspection agencies (PSI) with the exception of some items, which are exempted from certification by the PSI. In the case of goods supplied, VAT is determined on the basis of the value receivable by the manufacturer, producers or traders which will include the value of inputs purchased, all charges, commissions, fees, all duties and taxes including supplementary duty (except VAT) and profits. Detail VAT `rules and regulations are described in Value Added Tax Act, 1991, Value Added Tax Rules, 1991 and in Annual Finance Act.

VAT and Supplementary Duty can be paid into the branches of Bangladesh Bank and the designated branches of Sonali Bank through treasury challans or through Account Current. Self-clearance of VAT is permissible, and the system has gained wide popularity and has yielded substantially increased revenue. Computation of VAT whether under the self-clearance system or appraisement by Custom, Excise and VAT officials is simple. In the case of imported goods, it is usually levied at the rate of 15% of the total taxed value (see example below). In the case of goods supplied or services provided within

Bangladesh, VAT is usually levied at the rate of 15% of total turnover. A large number of items are exempted from VAT to the extent notified by the National Board of Revenue through SROs. An example of computation of VAT is shown below [10]:

VAT payable on importation of a brand new 1649 cc car on 5-7-2000:

Table 3: VAT Rate for New Cars

S/N	Value Added Tax (VAT)	Taka
1	C&F Value as per Bill of Entry	US$ 15,000.00
2	Value in Taka (if 1 US$ = Tk 55.00)	Tk 8,25,000.00
3	Add Insurance 1% of C&F Value or actual	Tk 8,250.00
4	Add landing charge 1% of Tk 8,33,250 (2+3)	Tk 8,332.50
5	Assessable value (landing cost) (2+3+4)	Tk 8,41,582.50
6	Customs Duty 37.5% of Assessable Value	TK 3,15,593.43
7	Duty paid value (5+6)	Tk 11,57,175.93
8	Supplementary Duty 65% of duty paid value	Tk 7,52,164.35
9	VAT 15% of total taxed value	Tk 2,86,401.04
10	VAT Payable	Tk 2,86,401.04

A. VAT Calculation:

The value declaration at the import stage has to be done by filling up the "Mushak-1Ka" and submitting it to the concerned Division Office. The method of calculating the value of the product on which VAT is to be charged at the import stage is given below [2]:

VAT chargeable base = Import duty chargeable base + Import duty + Supplementary duty + Other Taxes

Here, the import duty chargeable value refers to the assessable value entered in column 46 of the Bill of Entry for goods being imported. Other taxes refer to taxes such as Regulatory Duty, Safeguard Duty, etc. Similarly, at the manufacturing stage a value declaration has to be made so as to state the base on which VAT is to be charged. The value declaration at the manufacturing stage has to be done by filling up the "Mushak-1" form and submitting it to the concerned Division Office. The method of calculating the base on which VAT is to be charged at the manufacturing stage is given below:

VAT chargeable base = Import duty chargeable base + Import Duty + Supplementary Duty + Other taxes + Penalties at import stage + Commissions + Charges + Bank interest + Transportation costs + Remuneration + Depreciation of + Cost of raw materials + Profit

If a customer wants to know the base value of a product on which VAT is being charged of a product or service him or she is purchasing, the following formula can be used:

$$\text{VAT chargeable price} = \frac{\text{Price (Inclusive of VAT)}}{100 + \text{VAT RATE}} \times 100$$

The process of setting-off VAT paid by a business while purchasing its inputs (input tax) against VAT paid on its outputs (output tax) is known as rebates. For example, a business has paid Tk. 100 in input tax and has output tax incidence of Tk. 175. If the business can take a rebate of the entire amount of the input tax, the amount of tax it has payable to the government is:

Net VAT   = Output tax – Rebate
           = Tk. 175 – Tk. 100
           = Tk. 75

According to Section 9 of the VAT Act 1991, manufacturers or suppliers of taxable goods or providers of taxable services are entitled to receive rebate on input taxes against output taxes paid in the same period, except in the following cases: VAT paid on input is used in production of goods or provision of services exempted by VAT Act 1991, Turnover Tax rather than VAT applies to the business in question, Supplementary duty paid against inputs, VAT paid on reusable packaging at any time except the first time, VAT paid on Architectural plan, construction, expansion & renovation of, buildings, purchase & repair of furniture, air conditioners, fan, lighting equipment's and generators even if directly related to production of taxable goods or providing of taxable services, VAT paid on expenditure on travel, entertainment and staff welfare activities, VAT paid on inputs that have not yet been entered in the Purchase Register (Mushak-16), VAT paid on cell phone bill.

V. E-TAX SYTEM DEVELOPMENT

At first we have developed a website for all taxpayers who pay their tax in every fiscal year (1st July - 30th June). From this website taxpayers can check their tax and vat detail which they paid on product purchase or import any product from country or paid in previous years in NBR . For that this website should be government approved, has to have .gov.bd domain and should be internally linked with NBR database. Our website name is www.e-tax&vat.gov.bd. And we propose that whether it is bank transaction, salary payment, medical bill, or shopping, utilities bill, school fees and or any kind of payments, should be paid electronically.

For development www.e-taxvat.gov.bd (proposed) we use XAMPP software (Apache and SQL built in), Dreamweaver web development software (PHP built in), Microsoft Access. After creating database it will be connected with all databases of all kinds of financial organizations, like banks, shops, insurance company etc. Our proposed website and database finally linked with NBR and Administration of VAT website databases. The proposed connection layout is shown in Fig. 2.
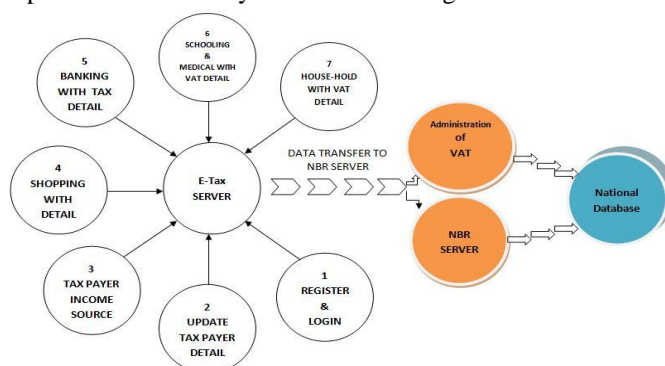

Figure 2: Proposed Connection Layout.

There are 27 fields in our table, when users submit their information's for registration then users must need to fill-up all fields to complete their registration. They can select own user name, password which will help login after registration. User must have TIN no. before registration because our system works with TIN no. Only registered users can make e-tax and get the full functionalities those this portal offered. After that, taxpayer receives an automatic account validation link through his given

email   to   activate   his   account. Once taxpayer account is functional, tax payer can use log-in name and password to access taxpayer account. This time a new 'E-tax' link will appear in the portal. This is needed for completing profile, control panel, and make online payments.

Fig. 3 shows the complete registration form. The red (*) mark indicates the mandatory fields are have to be fill-up. In this form, any user should provide his NID No, TIN No, e-TIN No, and all kinds of financial information with his present and permanent addresses and present professional details.

Each profile form has separate sections for income Tax, VAT, customs duty. One can fill up all fields or choose only relevant fields (i.e. only VAT information if you want to pay VAT). All new and updated information should be saved. Now the user is ready for e-payments.

After completing this step, all information will be store in www.e-taxvat.gov.bd database. NBR website is connected with this server they can optimize user control and check their information.

A.Making E-Payments

E-payment Procedure (Tax):

Persons who has Personal Income more than 2 lacs should pay Govt. Tax. Now we pay our tax once in end of the fiscal year, in existing system we need to submit tax return form and submit personal details, bank account details and many more supporting documents to NBR. But in proposed system, every instantaneous Tax and VAT payment of an taxpayer will be updated instantly through network by Tax or VAT card or from employer organizations or bank and so on. Usually Tax is deducted monthly from employer organization, half yearly from bank.

Figure 3: Register Form

Figure 4: Register User Database

E-payment Procedure (VAT):

During taking service from any financial organizations one should pay VAT. During purchase any product from any types of shop (Mega/Super/Jewelry/Restaurants etc.) one should pay VAT. Purchase products from online shop also need to pay VAT. If all purchases have done electronically by credit/debit card then the VAT payment updates goes to the database of Administration of VAT automatically.

Both Tax or VAT payers, NBR, Administration of VAT can check these payments updates from their own workstation. In this study we will only discuss about the person wise automated E-Tax payment system.

B.Tax Paying System From Person's Direct Income:

In this section we will show how tax deducted from Tax payer salary or any other monthly regular income which is paid by either through bank account or bank check or cash. If payment type is cash, then the Tax will be paid manually by challan. But this is out of our present discussion. In this proposal, we encourage all kinds of payment through bank account so that NBR can get every updates of Tax deduction through mother organization or bank. For every employee, organization calculates Tax in a prefixed percentage based on the basic payment, bonus, overtime payment. No amount will be charged on withdrawal from this salary/business account. Then at the end of the fiscal year, the organization pays all Taxes to the NBR on behalf of all employees. Then this information will be updated in every individual corresponding Taxpayer's database. Then this updated database will help the Taxpayer to calculate his total Tax in a year and also will make easier to fill-up the tax return form. After that there should be a provision to submit the Tax return from through online. At present every Taxpayer can submit only hard copy. Fig. 5 shows the Tax calculation system from every month salary statements.

Figure 5: Tax Pay System from Salary

The red marked portions are connected with www.e-taxvat.gov.bd database and update user Tax database by selecting their unique TIN No.

C.Tax Paying System From Bank

We design a software view for banking system which helps to collect Tax in every six month depends on their balance amount. Every transaction by Check or Cash or ATM will be updated in our proposed e-taxdatabase. So no one can hide their financial information from govt.   In this system tax will be charged based on annual balance from savings account, DPS account etc.

Figure 6: Deposit and Withdrawal Automation Software View

D.Paying VAT

We create a software layout for all kinds of shops, so the shoppers can collect VAT electronically from the buyers during purchase time. VAT will be calculating automatically on purchase amount by according to the govt. defined formula which will vary on product types. After every payment the taxpayer should punch his/her VAT card through the POS machine. Then the information about total paid VAT here and there for one year tenure for a Taxpayer will be updated in e-taxdatabase   'public_user'.   This   updated   information consequently verified by Administration of VAT during the submission of income tax return form. We would like to propose noticeable amount of concession of Tax based on paid VAT will be considered by NBR. At present, the consumers pay VAT during purchase but they don't aware about that. As a result the shoppers don't pay the VAT to govt. properly. They make false VAT statement, so the govt. looses a big amount of revenue. This novel step will encourage the taxpayer to use VAT card or Sub-VAT card after all kinds of payments. So no shoppers have a chance to make false VAT calculation.

Figure 7: Software View of Shops

This software will be connected with www.e-taxvat.com.bd by high speed net connection by using real IP.

E.Report

From the above red marked portions from three organizations linked software, our e-taxdatabase 'public_user' updates information for particular user. All individual tables are linked by Primary ID **'User Name'** of main profile of a user which in turn unique for every TIN No. The Primary ID for salary payment system is **'Employer ID'**. The Primary ID for banking system is **'Bank Account No'** and for product purchase system is **'TIN No'**. Fig. 8(a) & (b) shows the final updated database of example TIN No 3421.
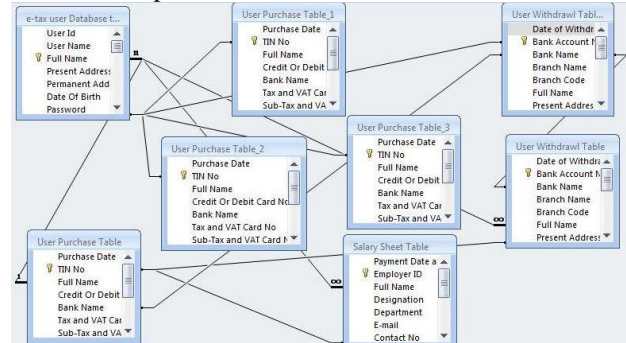

Figure 8(a): Relationship Between All Tables

REPORT

TIN NO	FULL NAME	EMPLOYER ORGANIZATION	TRANSECTION DATE	TAX AND VAT CARD NO
3421	X	Daffodil International University		4321
			4-Oct-14	
			8-Oct-14	
			10-Oct-14	

REPORT

SOURCE OF DEBIT/CREDIT	DEBIT/CREDIT CARD	DEBIT AMOUNT(TK.)	CREDIT AMOUNT(TK.)
Form ATM	Debit	10000	2000
From POS	Debit		

REPORT

GROSS SALARY	PROVIDENT FUND	BANK ACCOUNT NO	BANK NAME	BRANCH NAME
		101.010.108113	Dutch Bangla Bank Ltd.	Dhanmondi
20000	1000			
		101.010.108113	Dutch Bangla Bank Ltd.	Dhanmondi
			Dutch Bangla Bank Ltd.	

REPORT

BALANCE(TK.)	SHOPPING PLACE	PURCHASE AMOUNT(TK.)	TAX AMOUNT(TK.)	VAT AMOUNT(TK.)	TK.
			285		
8000			120		
	Agora	1500		22.5	
			405	22.5	Grand Total

Figure 8(b): Updated Database of User

In every month/year NBR or Taxpayer can generate a report from individual user profile about detailed Tax and VAT with all bank detail, purchase detail, withdrawal detail, salary detail etc. The hard copy of this report will also helpful during income tax return form submission.

F.Feedback

After submission of tax return form the authorities will assess all forms. If there is no problem then TIN/VAT certificate

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digitally signed with concern authority will be available in individual taxpayer's profile www.e-taxvat.gov.bd after certain fixed time, for example 6 months later from submission. If any problem occurs, then NBR send feedback/show cause notice through our website which will be notified by individual user profile. NBR also send notification by e-mail or conventional way, hard copy to permanent address of taxpayer. Certificates of previous years are also available in our proposed website, www.e-taxvat.gov.bd.

So, all the information `is accumulated against the TIN no. of a Taxpayer. We need to ensure that no salary or payment made, no bank account creation, no business license without TIN no. That means TIN no. is must. This system is an automated system where database will be simultaneously updated on any types of financial activities.

During the electronic payments of income, the designed database of a Taxpayer will be updated from employer's accounts database against TIN no. Again, any kind of accounts (like DPS, savings, current account) information and transaction history also will be updated from bank or any kind of financial organization through network in this website. Even when any taxpayer purchase any product from any shop or take food in any restaurant then he/she would pay VAT by using their Tax/VAT card which will be provide on registration against their TIN No. On other side, one would be dependent on any taxpayer in their family so that when he/she buy something, he/she must use Sub-Tax/VAT card for paying VAT which will in turn updated in our database 'public_user'. The mass people who don't have any knowledge about finance or having little knowledge, don't need to calculate the complex formula of VAT and Tax. It becomes more comfortable and accurate to fill-up the return form. So, the overall system will become more efficient.

Through interconnected networks between all kinds of financial organizations, NBR and Administration of VAT will get every updates of VAT and Tax information of all individual Taxpayers. Taxpayer can check their all financial detail here. Taxpayer can generate their all report from this site anytime in the year. So, we need a strong and high performed Communication Network.

In this database only user have an option to update their profiles; no other financial information can be changed by end user. The admin panel doesn't have any option for update profile or any kind of financial information of any taxpayer. So, the system will be more secured, consequently it helps to prevent corruption.

VI CONCLUSION

At present time our Taxpaying and VAT paying system is too much critical because Taxpayer need to submit their tax return form manually, calculation is too much complex, fraud Taxpayers have an opportunity to hide the information about their income, assets, unbounded expenditures etc. But in our automated system, every detail of all kinds of financial activities will be recorded in the database. So, there will be no opacity. The Taxpayers also can submit their tax return form by generating report from our site by using TIN no, which will be much easier process than present time. All types of financial companies, super shops, jewelry shops, restaurants must have our proposed design based software front end which will be

connected with our www.e-taxvat.gov.bd server. All VAT payment then will be recorded in this proposed database. So, Government could offer attractive concession on yearly Tax as a reward on certain maximum payment of VAT. At present time, this system is not available in any types of shops, financial companies. So, there is an opportunity to hide VAT information. User must have an option to update their profile, addresses etc. but admin didn't have any permission to update any profile or financial status in www.e-taxvat.gov.bd site. So, our proposed system is more efficient.

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[10] http://www.nbr.gov.bd/Welcome.php?lan=eng&id=5

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