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COMPUTER-BASED VAT COLLECTION SYSTEM FOR FEDERAL INLAND REVENUE
SERVICE - GOMBE INTEGRATED OFFICE

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ABSTRACT

The application of ICT tools and techniques has become necessary in various fields in Business, Technology, Engineering and science as it results in accuracy, flexibility, maintainability and timely operation which are vital for growth and accountability all over the world. The paper seeks to present a computer solution to the problem of VAT collection and recording system in Gombe State Integrated Office. A computer program was designed and coded using Visual Basic programming language that utilizes Access Database Structure. The program was capable of automatic recording and generating of receipts to payers. The payment details are automatically transmitted on-line/real-time to the head-office. The results from the program usage shows significant time was saved during processing and documentation details. Also, it completely eliminated fraudulent practices caused by falsification of receipts, and non/partial remittances. The system made it possible for increased revenue from VAT. It is recommended that the system implementation should be replicated nationwide.

Keywords: Information Technology, VAT, Remittance, Invoice, Statutory Allocation.

1. INTRODUCTION

There have been various controversies surrounding VAT collection in Nigeria. VAT-able organisations are reluctant to made payment due to their belief of foul-play on the part of official of the FIRS. These controversies includes payment receipts falsification, non-remittances and accountability of VAT collections, inaccurate VAT estimations etc. Also, there are still controversies as to whether the VAT collected by the individual officers are actually paid correctly or remitted into the Federal Government account.

These controversies may not be easily pushed aside. One possible solution to these controversies is the deployment of ICT (Information and Communication Technologies) to the management of information related to VAT. The deployment of ICT is termed automation. When organization as vital as FIRS in terms of revenue generation and most importantly, the aspect of VAT collections, are automated, then the country can expect accountability and accurate documentation of transactions. Such controversies as highlighted above will in no way find its way to the system.

The Federal Inland Revenue Service (FIRS) Integrated Office Gombe, Gombe State is a solely service oriented organization which is responsible for general VAT collections from all companies, private business owners, government parastatals in Gombe State, and remittance are made monthly in to the Federal Inland Revenue Service (FIRS) account of the Federation [4,5].

Gombe Integrated office is in charge of the collection of revenue in organizations that are VAT-able in Gombe State. Vat-able revenues include:

- i. State statutory allocation which comes from the Federal Government.
- ii. State Government Stabilization Grant, which is collected either once or twice a year in all local government.
- iii. Value Added Tax (VAT) which is collected monthly.

This research work is deployed mainly to the automation of VAT system (item iii above). Although, it can easily be modified to handle items (i) and (ii) above. [4]

1.1 BACKGROUND OF THE PROBLEM

Manual VAT collection system has failed to provide timely, secured and accurate VAT collection records; provide receipt as evidence of payment and remittance slips. The following are among some problems with the existing (manual) system.

- i. Invoice preparation leads to time mis-management thus resulting in delays.
- ii. VAT collectors and Cashiers are sometimes not available when payments are to be made.
- iii. Fraudulent practices such as falsification of receipts, alteration of figure, non-remittances of collections, double VAT rates in the existing system.
- iv. Abnormal expenditures in the printing of invoice and other stationeries for the record keeping purpose.

Given the above problems with the present system of VAT in Nigeria, it is therefore the objective of this work to develop and deploy Information Technology tools/Techniques to VAT management system. Among others this work will:

- i. Automation of the collection and remittance of VAT payment.
- ii. Provision of automatic receipt and invoice generation system after payment.
- iii. Provide complete documentation of all VAT collection details on-line/real-time to the VAT Head Office.
- iv. Automation that will provide faster and reliable method of generating monthly remittance reports which serves as balance sheet to the integrated office. The problem of imbalance in the Federation accounts on the part of the payers will be easily detected.

VAT simply called the Goods and Service's tax (GST) was levied on the value added that results from each exchange. It is an indirect tax collected from someone other than the person who actually bears the cost of the tax. It was invented by a French economist Maurice Laure' in 1954 and was first introduced in France on April 10, 1954 [5].

The Federal Government introduced VAT in January, 1994. Nigerians believed it was introduced as a means of avoiding taking loans from international agencies. According to analysts, the tax was intended to be a "Super Tax" to eradicate completely many other taxes related to goods and services. VAT was then imposed on virtually all goods and services whether produced Nigeria or imported. Exemptions however, was granted in respect of medical and pharmaceutical products, basic food items, fertilizers, agricultural and ventinary medicine, books and educational items, farming and transport equipment's, etc. The Value Added Tax effectively replaced the "Former Sales Tax", which, under the constitution, was supposed to be charged by States and not the Federal Government. Since 1994 VAT has become a major source of revenue for the government [1, 6, 7].

1.2 BANK COLLECTION AUTOMATION (PROJECT FACT)

An attempt has been made previously to computerized VAT by the FIRS. The project called 'Project Fact' was set up primarily to assist in reforming the FIRS collection system. The project was aimed at ensuring a tax collect system that is friendly, accurate, complete and timely. The major drawback of this system was that it does not take care of payments of VAT from the grassroots. It relies on the information supplied by cashiers on payment data and do not capture data directly at payment point. This is a major shortcoming of the system. It creates room for receipts falsification, non-remittances of collections and inaccurate estimations [3, 4]. Also, there are controversies as to whether the VAT collected by the individual officers are actually paid correctly or remitted into the Federal Government account. This was the focal point of the House of Representative Debate in the financial summit of July, 2008.

It is these shortcomings and fraudulent practices on behalf of the collectors that has necessitated the automation of the collection process of VAT at the payment point.

2. MATERIAL & METHODS

The methodology used in this research is the Structured Systems Analysis and Design (SSADM) which is an accepted Software Engineering Methodology and also adopted is the Expert System methodology, which involved knowledge engineering and process of inference [8].

First, we present the General Overview of the proposed System (Context Diagram), input design, Database structures; Algorithm of the program logic, Flowcharts is in Fig. 1, output design, and samples of the system output as shown in Fig. 3 and Fig 4.

2.1 SYSTEM INPUT & OUTPUT

In any organization of any system operation there is always an input into the system, which keeps system processing going if the input is wrong definitely the output will be wrong.

The input design for Revenue collection for Federal Inland Revenue Service Gombe Integrated Office includes particulars about a payers, which includes Company name, Address of the company, Tax types, Tax ID Number, Amount paid and date of payment. The system output consists of the receipts issue by the system to the taxpayer and a printout of the remittances to the government treasury at the end of the month as shown in Fig. 3 and Fig 4.

Below is the structure of the input files for revenue collection:-

Field Names	Type	Data Type
Company Name	String	String
Address/Location	String	String
Tax Type	Combo Box	none
Tax ID Number	Integer	Integer
Amount Paid	Integer	Double
Payment of Payment	Date	None

Algorithm of the System

1. Start
2. Welcome phase
3. Enter Login password
4. If password is valid
5. Open Main Program INPUT phase
6. INPUT Company Name
7. INPUT Company Address
8. INPUT Tax Type choose (“combo box”)
9. INPUT Tax ID Number
10. INPUT Amount Paid
11. INPUT Date of Payment
12. CONNECTED To Data Base
13. SAVE RECORD
14. IF LAST = “RECORD IS NOT FINISH”OR LAST = “LAST” THEN ADD NEW
15. IF LAST = “ADD NEW” THEN
16. NEXT
17. STOP

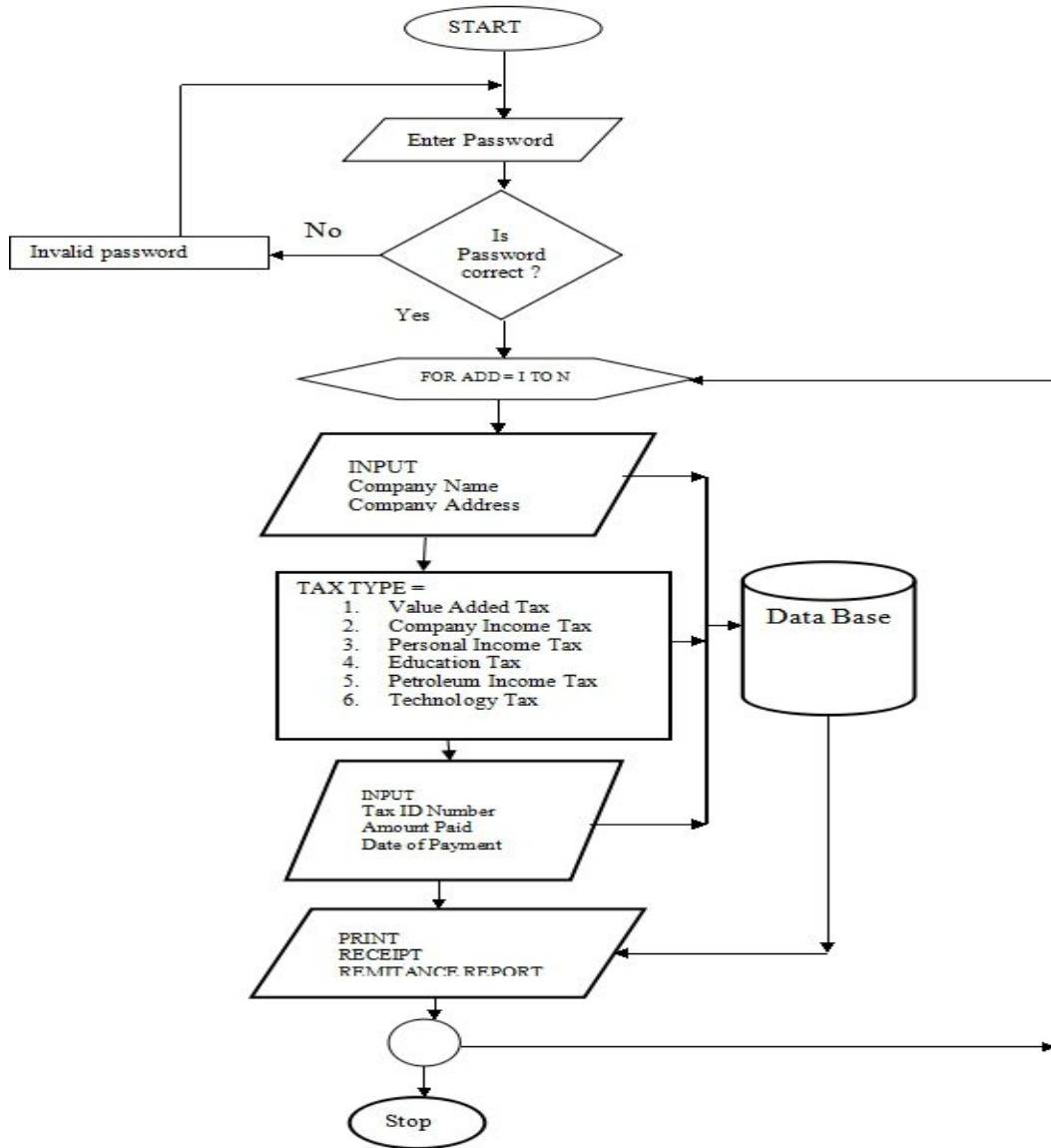


Fig. 1: Flowchart of the Computer-Based VAT System

3. CONCLUSION

Computer is a very useful tool in every aspect of human endeavor and the internal revenue collection is not left out. The Federal Inland Revenue Service Gombe integrated office handles a lot of revenue and as such it is necessary for the organization to implement this system. Installation of this system will enhance reliable and quick retrieval of tax collection records. All the Staff should be trained on the use and maintenance of the system. The use of computer will have a great impact on the Gombe Integrated office collection and storage of VAT information as well as improve the quality of services rendered to the public.

4. REFERENCES

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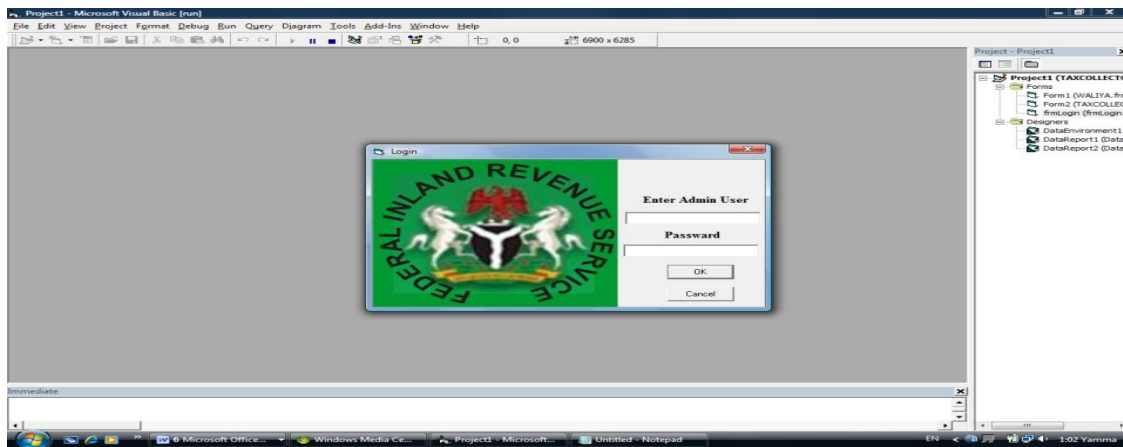


Fig 2: Administrator Login Dialog Box

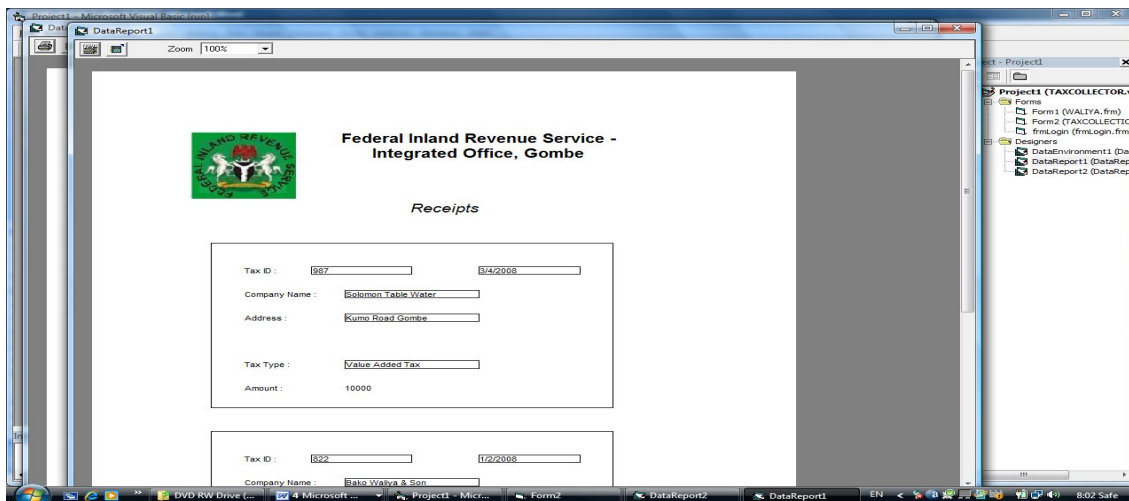


Fig. 3: VAT payer Receipt

Tax ID	Company Name	Address	Tax type	Amount	Date Of Payment
987	Solomon Table Water	Kumo Road Gombe	Value Added Tax	10000	3/4/2008
822	Bako Waliya & Son	No 12 Bank Road	Personal Income Tax	20000	1/2/2008
890	Sale Sale Nig	Along Kumo Road	Personal Income Tax	10000	2/5/2008
654	Jekadari & sons	Jekadafari layout	Company Income Tax	1007	2/3/2006
675	Jekada	Jekadafari Road Gombe	Company Income Tax	10007	1/3/2008
899	Malam Kuka & Son Limited	Bank road	Company Income Tax	44589	1/2/2008
897	Sehu Bala Nig. Ltd.	Kwoddom Crescent	Company Income Tax	9000	2/3/2008
898	Post Primary Board	Zone 2 Gombe	Education Tax	200000	2/4/2007
990	John & sons	Kasuwan Katakao	Capital Gain Tax	12009	2/8/2007
891	Primary Board Education	Zone 3	Education Tax	100000	2/3/2007
888	Higher Schools	Zone 4	Education Tax	200009	2/7/2008

Fig 4: VAT Remittance Report