

#### Advances in Research

13(1): 1-16, 2018; Article no.AIR.38046 ISSN: 2348-0394, NLM ID: 101666096

## Development of an Informal Sector and Tenement Taxes Monitoring and Compliance Enforcement Using Intelligent Based Electronic Policing System

### Olumuyiwa O. Fagbohun<sup>1\*</sup> and Obiseye Obiyemi<sup>2</sup>

<sup>1</sup>Department of Electrical and Electronic Engineering, Ekiti State University, Ado-Ekiti, Ekiti State, Nigeria.

#### Authors' contributions

This work was carried out in collaboration between both authors. Author OOF designed the study, wrote the protocol and wrote the final draft of the manuscript. Author OO managed the analyses of the study and the literature searches. Both authors read and approved the final manuscript.

#### Article Information

DOI: 10.9734/AIR/2018/38046

Editor(s):

(1) Shi-Hai Dong, Professor, Department of Physics, School of Physics and Mathematics National Polytechnic Institute, Unit Professional Adolfo Lopez Mateos, Mexico.

Reviewers:

(1) Ahmadu Abubakar, Federal University Dutsin-Ma, Nigeria. (2) Anna Wildowicz-Giegiel, University of Bialystok, Poland.

Complete Peer review History: <a href="http://www.sciencedomain.org/review-history/22748">http://www.sciencedomain.org/review-history/22748</a>

Original Research Article

Received 8<sup>th</sup> November 2017 Accepted 14<sup>th</sup> January 2018 Published 17<sup>th</sup> January 2018

#### **ABSTRACT**

Poor tax administration and tax evasion by the informal sectors, as well as non adherence to tenement tax payments with poor statistical data are of concern to local and State governments in Nigeria. This paper studies the problems associated with tax evasion which can be eliminated through the development of an intelligent based electronic policing of citizens in payments of their taxes with tax wizard platform. The tax wizard was developed with a web based css, html and java script programming language at the front end, and SQL at the back end to interact with the database to access each citizens records, and give information to the citizen on its tax liabilities with tax value cards for easy payments; as well as give every property a tax coded number, with caretaker records for default contact. The results shows that with the use of security identification of each citizen registered, the citizen can easily be monitored by various government establishment to enforce compliance. It is discovered that the application of the system

<sup>&</sup>lt;sup>2</sup>Department of Electrical and Electronic Engineering, Osun State University, Osogbo, Osun State, Nigeria.

will erase issues relating to corruption, tax evasion by the informal sector players, increase the revenue generation of government and improve the level of compliance, leading to a better economic growth.

Keywords: Informal sector; personal income tax; tenement tax; compliance; electronic policing.

#### 1. INTRODUCTION

National development is proportional to the level of taxes been paid to its government by citizens either personal or corporate, to finance its developmental activities. When the tax system is not pro-active, there is going to be many disjoints in the economy [1]. A good tax system is expected to be generative enough of financing the anticipated level of public spending in the most efficient and equitable way possible, as well as raise enough revenue to finance essential expenditures without recourses to excessive public sector borrowing [1]. The tax system should raise the revenue in a way that minimized its disincentive effects on economic activities and equitable, which does not deviate substantially from international norms [1,2]. The Nigeria tax system is basically structured as a tool for revenue generation, which derived its legacy from the pre-independence government based on 1948 British tax laws and have been mainly static since independence [2,3]. The need to tax personal incomes throughout the country prompted the income tax management act (ITMA) of 1961 [1,3]. In Nigeria, personal income tax (PIT) for salaried employment is based on a pay as you earn (PAYE) system, with several amendments to the 1961 ITIMA Act [3]. For instance, in 1985 PIT was increased from ₩600 or 10 percent of earned income to ₩2000 plus 12.5 percent of income exceeding ₩6000. In 1989, a 15 percent withholding tax was applied to savings deposits valued at ₩50000 or more while tax on rental income was extended to cover chartered vessels, ships or air craft [3]. In addition, tax on the fees of directors was fixed at 15 percent, and these policies were geared to achieve effective protection for local industries. greater use of raw materials, generating increased government revenue [4,5].

Taxation in Nigeria is enforced by the three (3) tiers of government, namely; the Federal, State, and local government with each having its sphere clearly spelt out in the levies approved list [5,7] as in Table 1. The major tax laws in existence as of September 2003 [6,7], and various related amendment include the following; i) Personal Income Tax act of 1993; ii) Companies profits Tax of 1990; iii) Petroleum

profits tax act of 1990; iv) The Petroleum tax act of 1990; v) Value –added tax act of 1990; vi) Education Tax Act of 1993; vii) Capital gain act of 1990; viii) Customs and Excise management Act of 1990; ix) Minerals and mining act of 1999; x) Stamp duties act of 1990; xii) 1999 constitution of the federal republic of Nigeria.

With the exception of the 1999 constitution of the Federal Republic of Nigeria, the tax laws had been amended on a yearly basis in conjunction with the annual budget to correct loopholes and to promote their use as macroeconomic management instruments [5]. Personal income tax (PIT) and capital gains tax and stamp duties payable by individuals are legislated by the federal government, but collected by state authorities [5,7].

Informal Sector of the economy include all those not involved in formal sector of employment where the personal income tax can easily be deducted under the PAYE system. The class of these informal sector workers includes the artisans, traders and farmers. Since the early 1990s, Nigeria has been moving away from direct to the indirect taxation considered to be less misrepresentation of facts. VAT, for instance, is less distorted because it is applicable to the value-added contents of imports and of domestically produced goods. The potential for maximizing the benefits of this taxation however, is constrained by structural problems in the economy. The predominance of the informal sector, constituting more than 50 percent of the country's economy, enables most domestic production to circumvent VAT [5,8,9]. Informal Sector income tax assessment and collection are rudimentary at present, with lack of adequate record keeping, and the records for payments often ambiguous. Often tax administration resorts to estimates that are prone to a wide margin of error, or open up tax evasion opportunities and corrupt practices. Ariyo [3] in 1997 points out that the proportion of self-employed relative to the total working population is substantial, yet tax authorities have not devised appropriate means of collecting effective personal income tax from this group. In fact, income from the selfemployed or informal sector activities is grossly

Table 1. Nigeria's tax system (taxes and levies approved for collection) Decree No. 21 of 1998 [5,7]

Federal government	State government	Local government
Company income tax	<ul> <li>Personal income tax</li> </ul>	Tenancy rate
	(applies to residents of the state)	
<ul> <li>Petroleum profit tax</li> </ul>	Withholding tax (individuals only)	Shops and kiosk rates
Value – added tax (applies to companies, residents of the	Capital gains tax (individuals only)	Fees for on-off liquor license
federal capital territory and	<ul> <li>Stamp duties (applies to</li> </ul>	Fees for butcher slabs
non-resident individuals)	instrument executed by individuals only)	<ul> <li>Fees for marriage, birth and death registrations</li> </ul>
Capital gains tax (applies to corporate gains tax (applies to	• Road taxes (e.g. vehicle license)	Fees for street name registration (except those
corporate bodies and Abuja	Taxes on pool bets, lottery and	of federal and state
residents)	casino wins	governments)
Stamps duties (applies to corporate bodies)	Business premises and registration fees in urban and rural areas: Urban	Cattle tax, applies to cattle farmers only
	area as defined by each state,	
	maximum of; (i) ₦ 10,000 for	Entertainment and road
	registration, and	closure levy
	• (ii) ₦5, 000 per annum for renewal of registration; Rural area	Fees for radio and
	(i) ₩2, 000 for registration, and (ii) ₩1,000 per	television license
	annum for renewal of registration	
Withholding tax (applies to companies	<ul> <li>Development levy (max. of 100 per annum applies to taxable individuals</li> </ul>	<ul> <li>Vehicle parking and radio licenses fees</li> </ul>
Danas nalinas nas tau (annlisa	only)	Channe a fan wysen af d
Personal income tax (applies to	Street name registration fees (state capital only)	Charges for wrongful parking fees for public
personnel of the armed forces, police, external affairs	Fees for right of occupancy on	convenience, sewage and effuse disposal
ministry, and residents of	urban land	Customary ground
Abuja	owned the state government	permit fees
	Market taxes and levies where sate finance is involved	<ul> <li>Fees for permits for religious establishments</li> </ul>
	Miscellaneous revenue	Fees for permits for
- 11.	(e.g. rent on property)	signboards, bill boards and advertisements

Note: Other major taxes authorized under different tax includes; (i) mining, rents and royalties; (ii)customs and excise duties (i.e., import and export duties), and (iii) miscellaneous revenue (e.g. earning from oil sales, rents on property [5,7]

untapped [3,5,6]. This situation also applies to excise tax and VAT because retail trade in Nigeria is incredibly large but substantially informal. The coverage of these forms of taxes depends largely on the progress. extent of economic undeclared economic activity such as hidden businesses or underground transactions which is predominant with Informal sectors is termed underground or hidden economy. The major

issue is how inland revenue authorities would tackle hidden economy covering these groups [5,9]:

- a) Business that should be registered to pay tax, such VAT, but are not;
- b) People who work in the hidden economy such as the rural areas with difficult terrain and pay no tax at all on their earnings.

 People who pay tax on some earnings but fail to declare other additional sources of income.

The underground economy is just one of many concerns that affects the tax system [5,9]. Whenever there are taxes, there will be tax evasion, and its consequences, alters the way in which government can deliver to its citizen on infrastructural development and income distribution. Therefore, the underground economy needs to be taken into account in predicting the impacts of tax changes [3,5,9]. On the issue of corruption, "In many cases political corruption is at least as serious as corruption of the tax bureaucracy [10]. Low salaries for tax officials, political protection of prominent tax evaders, poor monitoring of junior officials, high tax rates, high levels of discretion for the tax official, and poor information, generally are some of the Africa, Asia and Latin America" tax problems [5.9.10]. Measures to reduce corrupt practices are needed on a variety of fronts, and they need to be applied on an ongoing basis over a long period of time [11]. It is essential that as with reform, addressing corrupt tax practices come to be regarded as an on-going process and not as one-off event [5,10]. In the transition economics, ensuring that government officials and others do not misappropriate state assets is also a hugely challenging task because of the nature of property rights enforcement problems [5,7,10]. explanation of the phenomenon of corruption, in general, as well as in the specific case of corrupt tax practices, the principal-agent model (or agency theory) is frequently used [12,13]. The principal is usually a person or organization on whose behalf the agent undertakes various tasks. To avoid corruption, the key then is to design incentive structures in such a way that the agent acts in the interest reducing the opportunities for corruption, and strengthening the mechanisms for monitoring and punishment Corruption is prevalent in the administration of taxes and duties. Until very recently, it was commonplace to collect tax payments partly on behalf of one's self and partly for the government. Evaders prefer to bribe officials rather than pay taxes. Tax assessors collude with taxpayers, particularly with regard to the PIT, or in some cases, in connection with the assessment.

In Table 1, Federal government taxes had been well addressed with series of platforms in use to collect necessary taxes from citizens, however

States and Local governments taxes as it relates to informal Sector, tenement and others related are yet to be brought to the tax net in full. Personal income tax as it applies to the resident of a State is meant for State government collection, to boost their internal revenue generation, and informal sector constitute over 50% as enumerated [5,8]. In order to solve the problems of underground economy and informal sector tax evasion and also address the issue of corruption that is prevalent in the system with tax officials in tax collection, a tax monitoring and compliance enforcement platform is developed in this work. The tax platform was designed in such a way that is very interactive, and in a way to resolve the issue of double taxation.

#### 2. MATERIALS AND METHODS

The materials required for the development of the informal sector and tenement taxes monitoring and compliance enforcement is an electronic policing system package [14,15] developed for the maintenance of law and order in a given society. From the electronic policing package, the National security identification number NSI [15,16] generated for each citizen registered for monitoring is used for the tax paver as its primary input, to decide whether he/she is qualified for taxation as entrenched in the country's legislation. A Pentium 3 board with 800MHz speed, 2GB hard disk, 128MB memory, 31/2 floppy drive, a laser jet printer, enhanced keyboard with mouse form the hardware components required for the development, while the program used was developed with a web based css, html java script programming language at the front end, and SQL at the back end to interact with the database, as well as a mobile hand phone in use for the citizen end [14,15,17].

The method adopted in the work include visits to Ekiti State Inland Revenue Service (EKIRS) as well as Ondo and Osun States of Nigeria to gather necessary information and data required for taxation of citizens. The information from the Ekiti State Inland Revenue Service (EKIRS) were compared with Ondo and Osun States of Nigeria. to cater for likely differentials in the design. A flowchart for the electronic policing of informal tax payers were developed as shown in Fig. 1a, from the basic information and data received from EKIRS while tenement tax development flowchart is as shown in Fig. 1b. The tax payment platform was developed in a way that the tax paver can easily enter

NSI [15,16] on its tax wizard platform on his/her personal information, and login into its tax mobile device, with its password for security of accounts. The basic information required for

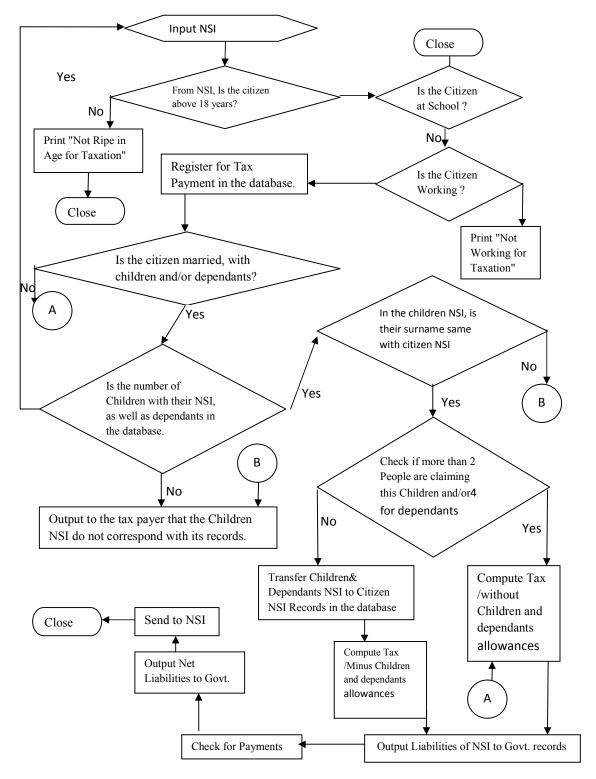


Fig. 1a. Flowchart design for electronic policing of Informal tax payers

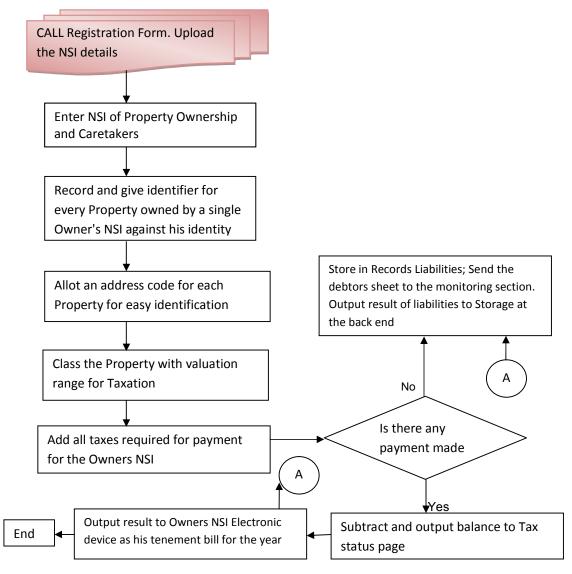


Fig. 1b. Line flowchart for tenement tax platform development

taxation of informal class citizen include: i. Age to determine suitability for tax payments, ii. Nature of work and whether the citizen is actively engaged, iii. The number of children as well as dependents, iv. The average salary per month. These information are used for the computation of tax as well as necessary allowances, and the maximum number of children and dependents allowed for necessary allowances. The tax registration form was developed as well as the payment status platform. On the payment status platform, a user can easily use a tax value card developed for purchase to pay for fractions or whole of its tax liabilities, while the database is designed store the details

every transactions and feedbacks with verifiable dates.

In the tenement tax development, the NSI [14,15] of the property owner as well as its caretaker is used to record and give an identifier for every property owned against the ownership identity, with address code for easy identification of location. The property is valued based on a range of classification for taxation, and all property taxes for a single owner are summed up and posted to his electronic mobile device for information , while the liabilities are stored in the database for payments made and defaults monitoring.

#### 3. RESULTS AND DISCUSSION

With the citizen registration on the National security information platform [14,15,16] which already has its comprehensive data captured, and issuance of a National identification number [NSI], the citizen enters its NSI number with its password to login into the developed integrated electronic policing (Intpolis) [14,15] Tax wizard platform as shown in Fig. 2. From this platform page, the tax registration form is loaded to request for some details required for tax determination.

The registration form includes filling of Employment details which may be in most cases - a self employer, and if not a self employer, the employer's name is requested for filling as shown in Fig. 3.

The average monthly Basic salary is requested to be filled in, to know whether the salary is below or above the minimum taxable in the year in question. The National Identification

Number of the children and dependents are requested for. From the NSI of the children as well as dependents, wrong information are easily filtered out, in which after the press button is pressed a message of necessary adjustments required is displayed as shown in Fig. 4 for a case in which the surname of the child whose NSI was provided does not correspond to the Surname of the taxable adult. If wrong dependents NSI were provided, the response from Fig. 4 gives a message that the dependant is not registrable for the tax relieve intention. In this case, issues relating to lies, corruption and incorrect information is easily filtered. If the registration is successful, the response page as shown in Fig. 6 is displayed on the users mobile device. The software uses the successful information supplied to calculate the necessary tax to be paid by the citizen in the year of assessment, as well as information on part payment made under the total tax paid till date in the year, including what remains to be paid for that same year as shown in Fig. 5.



Fig. 2. Login authentication

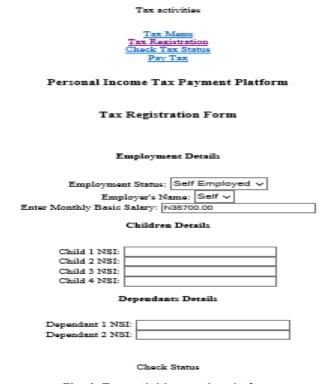
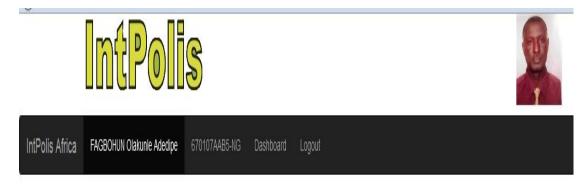


Fig. 3. Tax activities on the platform



Dear FAGBOHUN, Surname of the child1 does not correspond to yours Click here to go back

Fig. 4. Children details failure notice

If the citizen decides on paying daily, weekly or monthly, the platform supports such with a tax value card containing the serial number, the pin number as well as tax card value, as shown in Fig. 7 which is entered from the users mobile device for easy payment. The tax value card design is as shown in Fig. 8 with the tax value card containing the card pin number, the serial number and the value or amount for payment entered on the tax payment platform, which is sent to receive a payment confirmation. The tax

value card is designed to be available for sale on the shelf. For every payment, a payment configuration is sent to the citizen to confirm payment success as displayed in Fig. 9.

This has solved the problem of easy monitoring of citizens in their responsibilities to government by paying their taxes, without any means of evasion, as been practiced. On whether people would declare their normal income for the month or year, it is the duty of the tax administrator to

administer a minimum tax to its working population, except there is a proven case, of been a student, sickness, unfit or jobless. From the developed platform, the government would be able to gather huge financial resources from the artisans and other informal sector players.

On the issue of corrupt officers, the platform had already proffer a solution, in that, it adds more burden and losses to the tax payer, if the tax officials are bribed, in that it will not reduce its tax burden in its records, thus the tax payer is encouraged of buying a tax card on his own and load, for payment into government accounts to reduce his tax burden. Bribing would not be able to lessen or reduce the tax liability on any citizen or property owner records, which will reflect in his children's name at school if allowed to work in that form.

#### IntPolis Tax Wizard

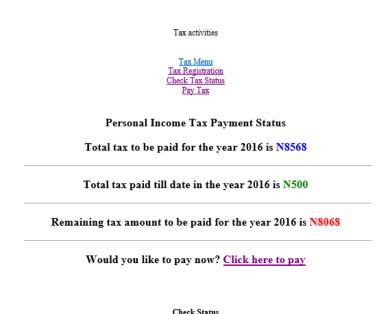


Fig. 5. Personal tax menu and liability information



Fig. 6. Response for successful registration

# Serial Number Pin number Card value PI0000001 9801494092 ₹500.00

Fig. 7. Tax value Card design

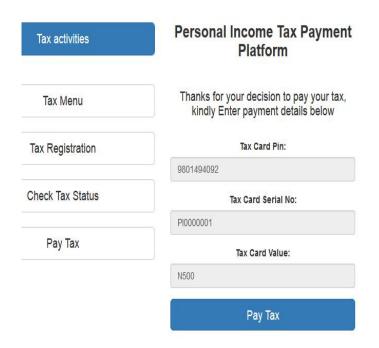


Fig. 8. Tax payment online form

Poor monitoring is solved, with easy readings from the hardware of defaulters which can easily be contacted by messages on his phone or other electronic communication device as warning before task force street checks.

Tenancy or tenement rate as in Table 1 is to be collected by local governments in Nigeria. This rate however is not being collected because of loopholes and corruption in the system without the application of technology to safeguard against such as earlier discussed. The rate or tax is to be collected by the local government to finance some of its capital and overheads, and in order to achieve this objective in addition to informal taxes platform, the platform as shown in Fig. 10 is developed.

From the personalized login of the citizen, as shown in Fig. 10a, the citizens can easily select whether he wants to register a new property, or check his tenement tax status or pay his property tenement tax for the year, as shown in Fig. 10b.

IntPolis Tax Wizard

Personal Income Tax Payment Platform

Tax Payment Successful!

Check your Tax Status

Fig. 9. Payment confirmation

The registration form developed for this property tax remission is as shown in Fig. 10c, and is expected to gather information about the owner of the property as well as the caretaker, who is in charge of the development, as well as the location address of such property with its description as developed with the use of the flowchart of Fig. 1b. It is to be noted that the system gives a unique code to the property for referencing as in Fig. 11a, and as such it is very easy to contact the Owner/caretaker of any default in its property tax payments, while blocking every avenue hitherto unaddressed, in the area of revenue loss, and corrupt acts of the tax collecting agents.

With the registration of a property, unique code for identification and policing becomes the monitoring reference for the development as in Fig. 11a, in which case, on the tenement tax platform, it is registered against the name of the house property caretaker, for tax obligations. With the property identity (id) entered and submitted to the tenement tax platform, the tax status of the property can easily be viewed by the caretaker as shown in Fig. 11b, without the need for a the third party interference, which resolves to a large extent the issue of in-house corruption.

In the tenement tax notification of Fig. 11b, the total amount of tax to be paid on the property with its identifier is stated for the year in question, while the total amount already paid by the caretaker is stated, and the balance expected for payment is displayed on the owner/caretaker electronic device when viewed without Interference.

The system was designed in a way to allow for paying of taxes in installments with the use of tax value cards developed as in Fig. 7, until the whole payment is made without a visit to any tax office.



Fig. 10a. Personalized login

#### Personal Income Tax



Fig. 10b. Tenement tax platform



Fig. 10c.Tenement tax registration platform

#### Tax activities

Tax Monu
Tenemet Tax Registration
Check Tenemet Tax Status
Pay Tenemet Tax

#### Tenement Tax Status

#### Enter your House ID to check status

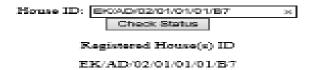


Fig. 11a. Tenement tax status checker

Tenement Tax Status

Your total tax to be paid for House ID:
EEC/ADN02/01/01/01/87
for the year 2016 is N1000

The total tenement tax paid for House ID:
EEC/ADN02/01/01/01/87
in the year 2016 is N

Remaining tax to be paid for House ID:
EEC/ADN02/01/01/01/87
for the year 2016 is N1000

Fig. 11b. Tenement tax notification platform

Tenement Tax Payment Platform

Thanks for your decision to pay your tax, kindly Enter payment details below



Fig. 11c. Tenement Tax payment platform

With the information of Fig. 11b, handy to the owner/ caretaker, the caretaker can be forwarded a text message from the tax office through its mobile phone as entered in its stored records to redeem its debt profile. The tenement tax payment platform developed for the tenement tax payment as in Fig. 11c, is used by the property owner/caretaker, to pay its property tax by buying

the tax value card as exemplified in Fig. 7, to enter its tax card pin and serial number to reflect the amount of payment he desires.

The tenement tax coding view from the back-end java script and SQL programming is as shown in Fig. 12a, with State and local governments code, towns under the local government and its code;

Zones and Areas with street definitions in codes under the streets, as well as the property number, for easy identification of compliance and tax payment monitoring.

Fig. 12a result at the backend is used to solve the problem of lack of statistical data, in which case, taxes from each street, area, zones, towns, and local government area can easily be monitored. This record gives a clear indication of what is expected for each local governments, on what had been paid, as well as being expected.

The registration coding view which shows the owner NSI, as well as the property caretaker NSI, the house file number and identifier, the property usage type, property type, as well as amount due for payment for the year in question,

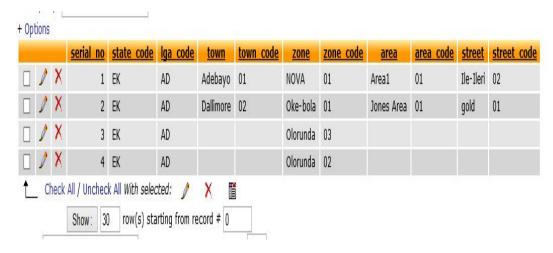


Fig. 12a. Tenement tax coding view from the backend users

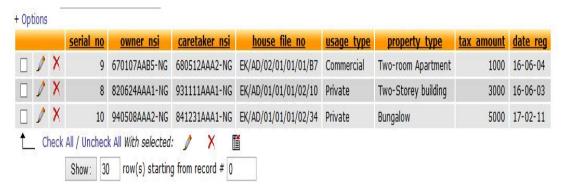


Fig. 12b. Registration for tenement coding view from the backend users.



Fig. 12c. Payment analysis page of subscribers view from the backend users

with date of registration of the property in the database is as shown from the back-end result of registration for tenement coding view from the backend users of Fig. 12b.

Fig. 12c shows the comprehensive of what had been paid into government accounts, and the indebted citizens. The payment analysis for comprehensive auditing which states the NSI of the property owner, with its biological names, the amount expected and what was paid is as in Fig.12c records. This development of electronic policing of tax compliance and remission to appropriate authorities will solve the problem of corruption and indecency in Nigeria and other developing nations experiencing the same problems in informal class tax evasion as in Nigeria.

#### 4. CONCLUSION

This paper shows that the problems of lack of statistical data, poor tax administration and tax evasion in Nigeria, particularly with the informal sector, as well as non adherence to tenement tax payment to government established institutions can easily be addressed with the application of an intelligent based electronic policing of citizens tax wizard platform.

The tax wizard platform uses the NSI of the citizen to create a tax record, which is connected and stored in the government database for monitoring of tax payments compliance and defaults policing. The front-end of the tax wizard platform which is accessible to the citizens with their NSI, is interactive and makes the application easy to use for tax payments. The tax payments are made with the use of tax value cards developed, and the system accepts installment or part payments. The front-end is also used by citizen to check their tax obligations and status without any third party interference. Thus, the amount being paid by the citizens on tax is entering into the designated government account for such purpose. The back-end of the tax wizard platform which is accessible only to the government agencies linked to the platform, provides adequate records on tax payments by the informal class players, with detailed information on citizen tax liabilities. From the back-end, the actual amount of taxes paid can easily be viewed for all citizens at a particular time, which is used to curtail issues of corrupt practices.

The application of the tax wizard platform in informal sector tax payment policing, and

tenement tax payment monitoring and compliance enforcement, is expected to redress issues relating to tax evasion by the informal tax players. This development will also reduce the inherent corrupt practices while increasing revenue generation of government and improving the level of tax payment compliance and leading to a better economic development and growth.

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

#### **REFERENCES**

- Adekanola O. Efficient tax collection and effective tax administration in Nigeria. Paper presented at a seminar organized by the University of Lagos Consultancy Services Otta. 1997;134-142.
- Ajakaiye DO, Odusola AF. Price effects of value added tax in Nigeria. National Centre for Economic Management and Administration NCEMA policy analysis Series. 1996;2(2):48–68.
- Ariyo A. Productivity of the Nigerian tax system: 1970 – 1990. AERC Research Paper 67. Nairobi: African Economic Research Consortium; 1997.
- Bariyima DK, Gladson N. Boosting Revenue Generation by State Governments in Nigeria: The Tax Consultants option revisited. European Journal of Social Sciences. 2009;8(4).
- Leyira CM, Chukwuma E, Asian AU. Tax system in Nigeria. Challenges and way forward. Research Journal of Finance & Accounting. 2012;3(5):10-16.
- CITN (Chartered Institute of Taxation of Nigeria). CITN Nigerian Tax Guide Statutes. Lagos Chartered Institute of Taxation of Nigeria; 2002.
- 7. FRN (Federal Republic of Nigeria). Personal Income Tax Act 1993. Federal Ministry of Finance; 2002.
- Ola CS. Income tax law and practice in Nigeria. Heinemann Educational Books; 2001.
- Odusola AF. Internally generated revenue at the Local Government: Issues and challenges. Paper presented at the Workshop on Revenue Generation at the State Government Level, October. University of Ibadan; 2003.
- FRN (Federal Republic of Nigeria). Report of the vision 2010 Committee Abuja. 1997;60-75.

- FRN (Federal Republic of Nigeria).
   1999 constitution of the Federal Republic of Nigeria. Official Gazette.
   1999;27:86.
- 12. Jensen MC, Meckling WH. Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics. 1976;3:305-360.
- Money W. Application of the technology acceptance model to a knowledge management system. Proceeding of the 37th Hawaii International Conference on System Science, Honolulu, HI; 2004.
- Nunn S, Quinet K. Evaluating the effects of information technology on problem oriented policing: If it doesn't fit, must we quit? Evaluation Review. 2002;26(1):81-108.
- Fagbohun OO. IntPolis -Integrated electronic policing system: Technical Report on Development, Prototype analysis, and fields of application" with Patent on invention certification No. NG/P/2013/754. Federal Republic of Nigeria; 2013.
- Fagbohun OO. Software development for electronic policing of a typical environment. Journal of Electronic and Communication Engineering (JECE), India. 2015;10(2) ver. 1:30-39. DOI: 10.9790/2834-10213039
- esci-mml: 2834-1002-0139.

  7. Fagbohun OO. Improving the policing system in Nigeria: Using electronic policing. Journal of Engineering and Applied Sciences, Medwell journals,

Pakistan. 2007;2(7):1223-1228.

© 2018 Fagbohun and Obiyemi; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
http://www.sciencedomain.org/review-history/22748