# The Effect of the Integrated Personnel and Payroll Information System on Payroll Fraud in Public Finance Management

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***Abstract***

*Owing to widespread public demand for transparency in governance and public finance management issues of accountability is now of serious concern in many countries including Nigeria. This has necessitated the introduction of varied mechanisms and structures for public finance management. This mechanisms and structures in Nigeria include the introduction of the Integrated Personnel Payroll Integrated System (IPPIS). This study examined the effect of the IPPIS on payroll fraud in public finance management in Nigeria. The study is anchored on the Technological Acceptance Model (TAM) as its theoretical consideration. The sample size of the study is 228 which was purposively derived from a population of 400 persons drawn from 13 purposively selected departments and agencies of the federal government. Data was generated using a 4-point Likert scale modified questionnaire. This was complimented by information gotten from Key Informant Interviews (KII) and from secondary sources such as books, journal articles and others. Generated data were analyzed via tables, percentages and qualitative content analysis, while hypothesis was tested by the use of chi-square. The study showed that the calculated chi-square of 67.64 is higher than the tabulated value of 9.49, implying that the IPPIS has significant effect on payroll fraud in Nigeria. The study thus, recommended that there should be regular audits and reconciliation of IPPIS data by the federal government authorities to ensure accuracy and detect potential fraudulent attempts.*

***Keywords:*** *Payroll, Personnel, Public, Fraud.*

## Introduction

Owing hugely to widespread public demands for transparency in governance and the global outcry against corruption; issues of accountability is now of serious concern in many countries including Nigeria. One of the critical issues dominating public sector management in Nigeria, as Addison (cited in Ejere, 2012) rightly observed, is lack of accountability and transparency. Lack of accountability in the public sector creates opportunities for corruption with its attendant negative consequences. For instance, through corruption the commonwealth of Nigerians is being diverted by a few, leaving the nation at a loss. Due to the poor culture of accountability, corruption has become a way of life in Nigeria; to the extent that it is trite to say that officials are not only corrupt, but corruption is official (Ejere, 2012). The scandalous revelations of large scale corruption and mismanagement of public funds by government officials have made public policy analysts and scholars such as Nkwe (2012), Kaaya (2011) to call on the government to think out of the box by adopting e-governance initiatives in the management of its finances, as a way of addressing the lack of accountability in the Nigerian public sector. Public finance management includes revenue generation, allocation, and expenditure management in government ministries, departments, parastatals, and agencies to ensure efficient and effective delivery of public goods and services. Two of such e-governance initiatives are the Treasury Singly Account (TSA) and the Integrated Personnel and Payroll Information System (IPPIS).

The Integrated Personnel Payroll and Information System (IPPIS) on the other hand, is an innovation which enhances productivity by removing cumbersome manual processes in Ministries, Department and Agencies (MDAs) in Government. Integrated Personnel Payroll Information System which is used to calculate salaries also provide a range of supporting functions such as preparing pay slips and payroll reports (Hyaledzigbor, 2015). It is connected to and is a component of an Integrated Financial Management Information System (IFMIS). Regardless of how well the department/agencies has organized its payroll, establishment control, budgeting, and personnel management activities, these systems must be tightly connected in order for information regarding staff expenses and deployment to be shared. According to Omolehinwa and Naiyeju (2015), this initiative is targeted at eliminating payroll fraud and ghost workers syndrome in the public sector.

The objective of the study was to assess the effect of the Integrated Personnel Payroll and Information System (IPPIS) on payroll fraud in public finances management in Nigeria. To achieve that; the study is posed with the question; how does the IPPIS affect payroll fraud in public finance management in Nigeria? Accordingly, the null hypothesis of IPPIS does not significant effect on payroll fraud in public finance management in Nigeria was raided to guide the study.

The study is portioned into five interconnected parts. Part one is the introduction which is just concluded. Part two covers a very brief explications on relevant literature to the study. Part three deals with the method of the study, part four is the data presentation and analysis which part five, the final covers the conclusion/recommendations.

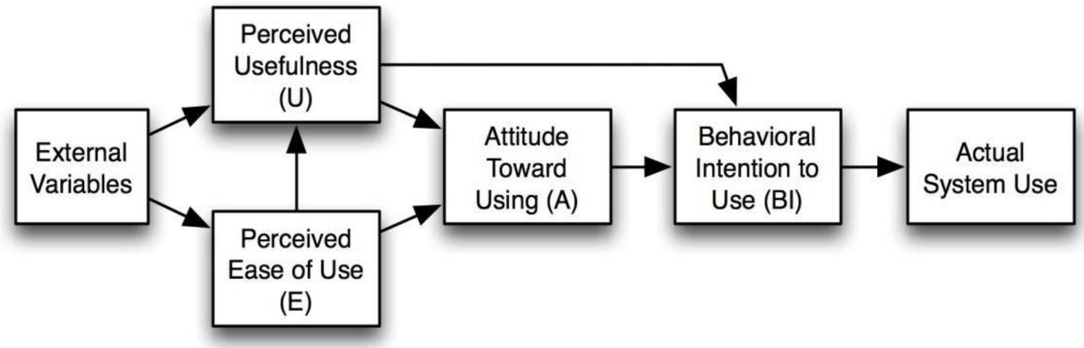
## Theoretical Consideration

### Technology Acceptance Model (TAM)

TAM is an information systems theory that models how users come to accept and use a technology. Davis (1989) presented a theoretical model aiming to predict and explain Information and Communication Technology usage behavior, that is, what causes potential adopters to accept or reject the use of information technology. This model however implies that emerging information technology cannot deliver improved organizational effectiveness if it is not accepted and used by potential users. Technology Acceptance Model is one of the most successful measurements for computer usage effectively among practitioners and academics (Kamel 2004). According to this model, technology adoption is a function of a variety of factors including Relative advantage and Ease of use. The two particular beliefs addressed by Technology Acceptance Model are;

1. Perceived usefulness (PU): Prospective user’s subjective probability that using a specific application system will increase his or her job performance within an organizational context
2. Perceived ease of use (PEOU): Degree to which the prospective user expects the target system to be free of effort.

**Figure 1 Technology Acceptance Model**
Source: Technological Acceptance Model (TAM) by F D Davis (1986)




Perceived usefulness (PU) and Perceived Ease of Use (PEOU) scales are as follows;

i. Perceived usefulness
ii. Work more quickly
iii. Job Performance
iv. Increased productivity
v. Effectiveness
vi. Makes job easier
vii. Useful
viii. Perceived ease of use
ix. Easy to learn
x. Clear and understandable
xi. Easy to become skillful
xii. Easy to use
xiii. Controllable
xiv. Easy to remember

Technology Acceptance Model (TAM) aims at studying how individual perceptions affect the intentions to use information technology as well as the actual usage. TAM suggests that when users are presented with a new technology, a number of factors determine their decision about how and when they will use it. The attitude toward adoption will decide the adopter's positive or negative behavior in the future concerning new technology. Perceived usefulness which is "the degree to which a person believes that using a particular system would enhance his or her job performance" and perceived ease of use refers to "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989).

Technology Acceptance Model (TAM) is relevant to this study as the theoretical framework considering the fact that successful implementation of Information and Communication Technology depends largely on the adopter's positive or negative behavior concerning new technology. TAM explains two theoretical constructs, perceived usefulness and perceived ease of use as the fundamental determinants of a technology system use and predicts attitudes toward the use of the system. The factors involving successful implementation of e-governance initiatives like TSA and IPPIS on public finance management as identified in this study which are availability of ICT infrastructures, ICT Capacity in terms of ICT skills, knowledge, values, attitudes and relationships and ICT adoption depend largely on the user's willingness and attitudes towards using the new technology. The constructs of Technological Acceptance Model which are perceived usefulness and perceived ease of use relates to the variables in this study and could also be seen as some of the elements that form the entire process of the e-governance implementation in public finance management. The key issues addressed by this study, that is, impact of e-governance initiatives like TSA and IPPIS could be best explained by this theory. The application of ICT in public finance management was based on the perception that ICT would increase accountability, transparency, effectiveness, and efficiency and would make work easier and faster.

The theoretical constructs of TAM also affect the performance of ICT as an institutional measure in tackling the problem of Corruption, payroll fraud, funds leakages and poor cash management in the departments and agencies (DAs) of government as relates to this study, E-governance implementation at DAs largely depend on the attitudes and perception of the staff of the government, citizens and clients towards the perceived usefulness of the automation process of government's business. Technology Acceptance Model (TAM) sees the user's willingness to use the system as very critical to the success of the system. The attitude and perception of the staff and entire citizens towards the automation of government's systems and processes will determine their willingness to support the process. Based on their perception of the entire new technology process, the organization would be willing to acquire the required ICT infrastructures and the new skills and knowledge required to operate the system, thus leading to successful implementation.

**Concept of Public Financial Management (PFM)**

PFM refers to the set of laws, rules, systems and processes used by sovereign nations (and sub-national governments), to mobilise revenue, allocate public funds, undertake public spending, account for funds and audit results. It is the management of finance in order to achieve the objectives of management. It involves all functions concerned with revenue generation and use of such financial resources for the attainment of the local government objectives.

Akinsulire (2019) stated that financial management involves the use of accounting knowledge, economics models, mathematical rules, systems analysis and behavioural science for assisting management in its management functions of financial planning, control and management. Financial management draws on related subjects such as financial accounting, management accounting, economics, law, quantitative techniques and behavioural science.

According to Pandey (2005), financial management is the managerial activity concerned with planning and controlling of the firms or organization financial resources. Finance is the life blood of any organisation, this required to be managed for the success of an organisation. Therefore, Banerjee (2009) opined that financial management involves systematic efforts of management devoted to the management of finance needed for all organisational activities. This involves sources of fund and employment of such in various areas of organization for the attainment of organisation objectives. Hassan (2011) stated that financial management tends to be beneficial only when activities are properly planned and executed. It is a whole system to the extent that when a unit of it is defective, the whole structure becomes defective. Financial management in local government entails revenue generation, fund allocation, resources administration and treasury management.

It encompasses a broader set of functions than financial management and is commonly conceived as a cycle of six phases, beginning with policy design and ending with external audit and evaluation. A large number of actors engage in this "PFM cycle" to ensure it operates effectively and transparently, whilst preserving accountability.

**Importance of a Strong Public Financial System**

A strong PFM system is an essential aspect of the institutional framework for an effective state.

i. Effective delivery of public services is closely associated with poverty reduction and growth, and countries with strong, transparent, accountable PFM systems tend to deliver services more effectively and equitably and regulate markets more efficiently and fairly. In this sense, good PFM is a necessary, if not sufficient, condition for most development outcomes.

ii. A key element of statehood is the ability to tax fairly and efficiently and to spend responsibly. These are fundamental characteristics of 'inclusive' state institutions, which generate trust, promote innovative energies and allow societies to flourish. (See Acemoglu & Robinson, 2012, 'Why Nations Fail' and Dani Rodrik, 2003, 'In Search of Prosperity').

Improving the effectiveness of a PFM system may generate widespread and long-lasting benefits, and may in turn help to reinforce wider societal shifts towards inclusive institutions, and thus towards stronger states, reduced poverty, greater gender equality and balanced growth. Even where donor staff do not seek to strengthen PFM systems, they need to understand them because they will often work through them, by providing budget support or climate finance, or with them, by providing project-financed interventions, which are then staffed and maintained through the national budget. In short, PFM matters, and all donor staff need a basic knowledge of PFM.

**Objectives of Public Financial Management**

To assess a PFM system, we first need to define its end objectives – the final outcomes, by which performance can be measured. It is generally accepted that a PFM system should achieve three objectives, to which we here add a fourth, namely the promotion of accountability and transparency, which is increasingly seen as an objective in itself, because of its close relationship to the notion of inclusive institutions:

The maintenance of aggregate fiscal discipline is the first objective of a PFM system: it should ensure that aggregate levels of tax collection and public spending are consistent with targets for the fiscal deficit, and do not generate unsustainable levels of public borrowing

Secondly, a PFM system should ensure that public resources are allocated to agreed strategic priorities, in other words that allocative efficiency is achieved

Thirdly, the PFM system should ensure that operational efficiency is achieved, in the sense of achieving maximum value for money in the delivery of services

Finally, the PFM system should follow due process and should be seen to do so, by being transparent, with information publicly accessible, and by applying democratic checks and balances to ensure accountability.

**Integrated Personnel Payroll and Information System (IPPIS)**

The Integrated Personnel and Payroll Information System is one of the Federal Government of Nigeria's Public Financial Management reform programs (IPPIS). Its objective is to help the Nigerian government enhance human resource management and prevent fraud. IPPIS is a centralized computer-based payroll and administration system described by Omolehinwa and Naiyeju (2015) as a system targeted at eliminating payroll fraud in the public sector. Its primary goal is to determine the exact number of employees and the entire salary expense at a single glance. It also aims to maintain data integrity, ensuring that personnel data is accurate and complete. According to IPPIS department (2015), explained that IPPIS was designed to achieve the following objectives: facilitate human resources planning by providing information for decision making; provide a platform for accurate budgeting and annual recurrent expenditure on staff emoluments; monitor monthly payment of staff emoluments against FGN's annual budget to ensure minimal wastage and leakage; eliminate payroll fraud such as multiple payment of emoluments to single employee or payment of monthly salary to a non-existent employee; facilitate easy storage, updating, and retrieval of personnel records; ensure database integrity so that once entered cannot be manipulated by unauthorized users; enhance confidence in the process of determining staff emolument cost; prompt deduction and remittance to accounts of all third parties payments such as Pension Fund Administrators (PFAs), National Health Insurance Scheme (NHIS), Pay As You Earn (PAYE), etc (Enakirerhi & Temile, 2017).

The Office of the Accountant-General of the Federation (OAGF) manages the Integrated Personnel Payroll and Information System (IPPIS) in collaboration with the Office of the Head of Service (OHCSF), the Federal Civil Service Commission (FCSC), the Budget Office of the Federation (BOF), the Office of the Auditor-General of the Federation (OAUGF), and the Central Bank of Nigeria (CBN) (Adongoi & Eyo, 2014). IPPIS is based on an intranet that connects the MDAs' data centers to the OAGF's primary server (Omolehinwa & Naiyeju, 2015). IPPIS has saved the Federal Government of Nigeria billions of Naira since April 2007 due to discrepancies between the personnel budget and the actual amount paid by IPPIS for MDAs (IPPIS Department, 2015). There were 396 MDAs registered on IPPIS as of December 2015. In 2016, the Nigeria Police Force, Nigeria Immigration Service, Nigeria Security and Civil Defence Corps (NSCDC), and Federal Fire Service, as well as universities, polytechnics, and colleges of education, will join IPPIS (Oguzierem & Sofri, 2017).

According to IPPIS (2018), the Integrated Personnel Payroll and Information System (IPPIS) is a World Bank-assisted project under the Economic Reform and Government Project (ERGP) aimed at establishing a reliable and comprehensive database for the public service, facilitating manpower planning, assisting in providing information for decision making, eliminating double dipping, and credentialing the public sector. The IPPIS initiative enables government ministries and MDAs to identify and eliminate ghost workers in order to achieve public accountability in governance (Nyaledzigbor, 2015). Salary is the personal emolument provided to an employee of an organization, generally for monthly services rendered at a fixed rate of compensation, according to the 2013 constitution. Furthermore, the Financial Regulations Act stated that until otherwise changed by legislation, the standard payroll system must be used in all offices.

The Integrated Personnel Payroll and Information System, as well as the Integrated Financial Management System, have improved openness and accountability in government spending. The Federal Ministry of Finance recognized in 2013 that IPPIS has improved personnel cost planning and budgeting since it is based on actual, verifiable objectives rather than estimates (Oyedele, 2015). As a result, job possibilities have increased, corruption in government-owned businesses has decreased, and staff expenses have decreased. It has improved the efficiency of conducting government business by restoring public confidence in the payroll system and budgeting, greatly improving information and reporting management, providing opportunities for improved infrastructural facilities, and creating a serene work environment and job security (Oyedele, 2015).

Employees anticipate bureaucratic delays, deteriorated facilities, wicked unionism, lower wages for recruiting, and a lack of sensitivity and dedication on the side of the government in terms of carrying out its plans in the past. Mayo (2001) examined the attainable success and concluded that it can be achieved entirely by its use at all levels of government, particularly at the local level, in order to address the system's ongoing issue of ghost workers.

According to Aganga (2011), Integrated Personnel and Payroll Information System (IPPIS) is one of the Federal Government Reforms Initiative conceived to transform the Nigerian Public Service and make it more efficient and effective in-service delivery. The IPPIS initiative is aimed at improving the public financial management and providing a centralised payroll system in the country. IPPIS is designed to enroll into platform, all federal government ministries, departments and agencies, that draw personnel cost fund from consolidated revenue fund. The AGF said when fully functional, the system will help solve the challenges for lack of efficiency lack of central control, lack of central management and lack of edition of figures. Besides, he said, the elimination of replacement of personnel costs in the country.

Okonjo-Iweala (2011) opined that the objectives of the Integrated Personnel and Payroll Information System (IPPIS) policy amongst others are to centralize payment of worker salaries, which stated as a means of facilitate convenient staff remuneration payment with minimal wastage, also to facilitate easy storage, updating and retrieval of personnel record for administrative and pension processing, it also enhance manpower planning and budgeting, it also ascertain actual personnel emoluments of the federal government.

**IPPIS and Payroll Administration in Nigerian Public Sector**

One of the projects initiated by the Federal Government (FG) in the public service is the Integrated Payroll and Personnel Information System (IPPIS) via the use of Information and Communications Technology (ICT). The IPPIS was introduced to adequately prove the effectiveness and efficiency of payroll administration in the government’s Ministries, Departments and Agencies (MDAs). Prior to its implementation by the FG, it was outlined that the IPPIS would accurately and reliably provide the overall personnel information as required by the Office of the Accountant General of the Federation (OAGF). Nigerians were further informed that the electronic platform, if fully implemented, would drastically and holistically reduce or completely eliminate all forms of corrupt and sharp practices as well as facilitate modern scientific and apt budgeting cum forecasting. It’s noteworthy that the IPPIS could boast of a separate department under the OAGF (Nwaozor, 2020). The department or unit is solely responsible for payment of salaries and wages directly to FG employees’ bank accounts. It has equally been reported that apt deductions are instantly made, followed immediately by remittances to a team of third-party beneficiaries such as the Federal Inland Revenue Service (FIRS), State Boards of Internal Revenue (SBIR), National Health Insurance Scheme (NHIS), National Housing Fund (NHF), Pension Fund Administrator (PFA), Cooperative Societies, Trade Unions’ Dues, Association Dues, Bank Loans (if any) and what have you. Recently, the IPPIS department boasted that since inception of the tech-driven mechanism in April 2007, the unit had saved billions of naira for the FG via elimination of thousands of ghost workers and allied matters. It’s worthy of note that the streamlined key functions or core mandate of the IPPIS department are, but not limited to: management of FG employees’ records, payment of salaries and wages to the employees, deductions of taxes and other third party payments, remittance of payroll deductions to the benefitting bodies, and enrolment of employees into the IPPIS database.

The overall mission of the IPPIS is to pay the FG employees on-time and accurately within statutory and contractual obligations. Whilst its vision is to have a centralized payroll system that meets the needs of the said employees as well as help the government to plan and manage payroll budget by ensuring proper control of personnel cost. It could be recalled that recently, sequel to the FG's frantic move to ensure that all employees are duly enrolled into the IPPIS, the workers of the federal tertiary institutions of learning across the federation – particularly those of the universities – frantically rejected the plan, stating it was against the international extant law that permits the university autonomy.

**Method**

The research design adopted for this study is mixed method research design.
The population of the study consisted of;

| | |
|---|---|
| Federal College of Education (Technical) Omoku | 55 |
| National Oil Spill Detection and Response Agency (NOSDRA) | 36 |
| Federal Pay Office (FPO) | 15 |
| Federal Road Safety Corps (FRSC) | 25 |
| National Security and Civil Defence Corps (NSCDC) | 65 |
| Federal Radio Corporation of Nigeria (FRCN) | 20 |
| National Orientation Agency (NOA) | 28 |
| Standard Organization of Nigeria (SON) | 16 |
| Federal Inland Revenue Service (FIRS) | 56 |
| NationalPopulation Commission (NPC) | 25 |
| Industrial Training Funds (ITF) | 18 |
| National Directorate of Employment (NDE) | 21 |
| Corporate Affairs Commission (CAC) | 20 |
| **Total** | **400** |

The purposive sampling technique was used to purposively allocate the sample size of each department or agency because the departments and agencies are not all equal size in terms of staff strength. As such

| | |
|---|---|
| Federal College of Education (Technical) Omoku | 35 |
| National Oil Spill Detection and Response Agency (NOSDRA) | 16 |
| Federal Pay Office (FPO) | 5 |
| Federal Road Safety Corps (FRSC) | 15 |
| National Security and Civil Defence Corps (NSCDC) | 35 |
| Federal Radio Corporation of Nigeria (FRCN) | 10 |
| National Orientation Agency (NOA) | 8 |
| Standard Organization of Nigeria (SON) | 10 |
| Federal Inland Revenue Service (FIRS) | 36 |
| NationalPopulation Commission (NPC) | 15 |
| Industrial Training Funds (ITF) | 8 |
| National Directorate of Employment (NDE) | 15 |
| Corporate Affairs Commission (CAC) | 20 |
| **Total** | 228 |

The main instrument of data collection was the Questionnaire, which was administered on Two Hundred and Twenty-Eight (228) respondents drawn from the 13 (thirteen) departments and agencies. They were chosen through the purposive sampling technique**.**

The study adopted both the quantitative and qualitative methods of data analysis. For the quantitative method, the responses from the questionnaire were presented in statistical tables and converted to percentages. Descriptive tools like simple percentage were used to analyze and present findings, because it makes for easy comprehension of the answer or responses given by the respondents.

The chi-square statistical tool was used to test hypotheses at the five per cent degree of freedom and validate or invalidate the relationship between variables. The qualitative content analysis was used to analyze the data from secondary sources.

**Data Presentation**

**Table 1: Showing the Distribution of Questionnaire**

| **Das** | **No. Distributed** | **No. Returned (%)** |
|---|---|---|
| Federal College of Education (Technical) Omoku | 35 | 30 |
| National Oil Spill Detection and Response Agency (NOSDRA) | 16 | 11 |
| Federal Pay Office (FPO) | 5 | 5 |
| Federal Road Safety Corps (FRSC) | 15 | 10 |
| National Security and Civil Defence Corps (NSCDC) | 35 | 31 |
| Federal Radio Corporation of Nigeria (FRCN) | 10 | 8 |
| National Orientation Agency (NOA) | 8 | 5 |
| Standard Organization of Nigeria (SON) | 10 | 8 |
| Federal Inland Revenue Service (FIRS) | 36 | 35 |
| NationalPopulation Commission (NPC) | 15 | 10 |
| Industrial Training Funds (ITF) | 8 | 7 |
| National Directorate of Employment (NDE) | 15 | 12 |
| Corporate Affairs Commission (CAC) | 20 | 8 |
| Total | **228** | **175 (76.75% )** |

**Source:** Researcher's Field Work, 2024

From the table above, it shows clearly that 228 questionnaires were distributed to our respondents in order to give necessary information on the impact of e-governance on public finance management. The table reveals that the selected Departments and Agencies for study received different quantities of questionnaire, depending on their sizes and population figure. The table also reveals that out of the 228 questionnaires distributed, 175 were completely filled and returned, representing 76.75%.

The returned questionnaire was presented as shown in the demographics of age range, sex, educational qualifications and Levels of experience as shown in the tables below.

**Bio-Data of Respondents**

**Table 2: Respondents based on age range**

| S/N | Age Range (in years) | Frequency | Percentages (%) |
|---|---|---|---|
| 1 | 25 – 30 | 15 | 8.57 |
| 2 | 31 – 35 | 55 | 31.43 |
| 3 | 35 – 40 | 80 | 45.71 |
| 4 | 40 – Above | 25 | 14.29 |
| | TOTAL | 175 | 100 |

**Source:** Field Survey, 2024.

From this table, greatest percentage of staff falls within 35-40 years (45.71%) followed by the age bracket of 31-35years (31.43%). Youngest staff members of ages 25-30 (31.43) was next in the staff strength. The older staff members are within the ages of 40 years and above (14.29%).

**Table 3: Respondents based on sex**

| S/N | SEX | FREQUENCY | PERCENTAGE (%) |
|---|---|---|---|
| 1 | Male | 101 | 57.71 |
| 2 | Female | 74 | 42.29 |
| | Total | 175 | 100 |

Source: Field survey, 2024

From table 3, male staff members are 57.71% while female 42.29%.

**Table 4: Respondents based on Educational Experience**

| S/N | Educational Qualifications | Frequency | Percentages (%) |
|---|---|---|---|
| 1 | HND/BSC | 110 | 62.86 |
| 2 | MSC/PhD | 65 | 37.14 |
| | Total | 175 | 100 |

Source: Field survey, 2022

From table 4, HND/BSc Holders 62.86%, while MSc/PhD are 37.14%.

**Table 5: Respondents based on the Level of Experience**

| S/N | Levels of Experience | Frequency | Percentage (%) |
|---|---|---|---|
| 1 | Highly Experienced | 50 | 28.57 |
| 2 | Moderately Experienced | 90 | 51.43 |
| 3 | Low Experience | 35 | 20.00 |
| | Total | 175 | 100 |

Source: Field survey, 2024

From table 5, greatest percentage of staff 51.43% are moderately experienced while the highly experienced are 28.56%. Only a small 20% have low experience.

**Data Analysis**

**Table 6: The IPPIS has significant effect on payroll fraud control in public finance management in Nigeria**

| Variables | Observed Number | Expected Number | Difference |
|---|---|---|---|
| Strongly Agree | 90 | 43.75 | 46.25 |
| Agree | 31 | 43.75 | -12.75 |
| Disagree | 34 | 43.75 | -9.75 |
| Strongly Disagree | 20 | 43.75 | -23.75 |
| Total | 175 | | |

Source: Researcher's field work, 2024

Table 6 above shows 90 respondents strongly agreeing that the IPPIS has significant effect on payroll fraud control in public finance management in Nigeria, while 31 agreed, 34 disagreed and 20 disagreed. This implies that majority of the respondents believe that the implementation of TSA and IPPIS is wrought with some challenges that the government should address.

**Hypothesis**

Ho3: IPPIS implementation does not have significant effect on payroll fraud control in the public finance management in Nigeria.
Ha3 IPPIS implementation has significant effect on payroll fraud control in the public finance management in Nigeria.

| Variables | Observed Number | Expected Number | Difference |
|---|---|---|---|
| Strongly Agree | 90 | 43.75 | 43.75 |
| Agree | 21 | 43.75 | -22.75 |
| Disagree | 34 | 43.75 | -9.75 |
| Strongly Disagree | 20 | 43.75 | -23.75 |
| Total | 175 | | |

$$X^2 = \frac{(90 - 43.75)^2}{43.75} + \frac{(31 - 43.75)^2}{43.75} + \frac{(34 - 43.75)^2}{43.75} + \frac{(20 - 43.75)^2}{43.75} +$$

$= 48.89 + 3.72 + 2.17 + 12.89$

$= 67.64$

Degree of freedom, Df = (r-1)(c-1)
Where r = 4 and c = 2
$X^2$ tab at 5% level of sig = 9.49

**Interpretation:**

Owing to the analysis of the hypothesis, the statistical chi-square value of 67.64 is higher than the tabulated value of 9.49 at 5% level of confidence. This implies that IPPIS implantation has significant effect on payroll fraud control in the public finance management in Nigeria, as we reject the null (Ho).

**Observations, Excerpts of Key Informant Interviews (KIIs) addressing Research Question Four**

Also, presented below are excerpts of the Observations, Key Informant Interviews that were conducted in some of the MDAs between the 13th and 24th of February, 2025. The observations and excerpts of the interviews are here summarized, and are to be employed to answer the questions and draw up conclusions for the study.

A staff of the office of the Bursar at Federal College of Education (Technical) who was interviewed as a key participant regarding how the IPPIS has curbed payroll fraud: Before the introduction of IPPIS cases of payroll fraud were rife, with IPPIS payroll fraud became a thing of the past. (KII February 13, 2025).

Going further, research participant at the Federal Inland Revenue Service (FIRS) stated that the: IPPIS uses biometric verification to ensure that only legitimate employees are paid. (KII/January 15th, 2025).

Another Key participant interviewee at the Federal Pay office observed: IPPIS automates payroll processing, reducing the risk of human error and manipulation, which has helped to curb payroll fraud (KII/ January 17th, 2025).

Again, a key informant participant at the Federal Road Safety Corps interviewed pointed out that: IPPIS streamlines the payroll process, reducing the time and resources required to process payroll (KII January 18th 2025).

In the same vein, a staff of the Federal Pay Office who participated in the KII observed that: IPPIS allows for real-time monitoring of payroll transactions, enabling swift detection and response to suspicious activities. He further noted that IPPIS provides a centralized database for employee data, making it easier to manage and update employee information. (KII held on February 5, 2025).

**IPPIS Has Eliminated Payroll Fraud**

Again, a content and thematic analysis of the data gotten from Texts, Journals, Articles, Bulletins, Gazettes etc, and from Observation, KIIs and from. the analysis of the responses from the structured research questions, and as seen in the fourth hypothesis tested whereby the calculated chi-square of 85.72 is higher than the tabulated value of 9.49, it is observed that IPPIS has significant impact on payroll fraud control in the management of public finance. This is in tandem with. Obara, Nangih and Agba (2017),

The quality of government payroll administration has vastly improved and an increasing number of MDAs are moving away from manual payroll administration. The MDAs have the necessary information for planning their personnel costs. IPPIS has actually reduced corruption by virtually eliminating ghost-worker syndrome where applied, thereby reducing the cost of governance. The Scheme has, from its launch in 2007 to December 2014, saved the government ₦185 billion (about US$1 billion), representing the difference between the money that government would have released to MDAs based on their estimated nominal roll submissions and the amount actually paid through the IPPIS platform.

A breakdown of this shows that ₦416 million was saved in its first month of operation and ₦12 billion at the end of its three-year pilot phase. The scheme now covers 359 MDAs and has successfully enrolled 237,917 members of staff and weeded out 60,450 ghost workers.

Furthermore, it reduced the red tape involved in manual payroll administration (Office of Accountant General of the Federation, OAGF, 2020). Within 13 years of IPPIS implementation, the payroll policy has recorded some remarkable achievements.

Again, in 2016, the Ministry of Finance said that over 24,000 illegal personnel in the federal public service payroll had been identified, saving the government approximately N2 billion Naira. This is on top of the approximately 60,000 unidentified workers that were stricken off the federal government's payroll in 2014. (Olken & Pande, 2012).

**Conclusion/Recommendations**

From the analysis of the responses from the structured research questions, it is observed that IPPIS has significant effect on payroll fraud in the management of public finance in Nigeria. This is also seen in the outcome of the hypothesis examined where the statistical chi-square value of 67.64 is higher than the tabulated chi-square value of 9.49.

Flowing from the finding, the study made the following recommendations:
Firstly, the federal government should institute regular monitoring and evaluation of IPPIS to identify areas for improvement and ensure effective utilization.
Secondly, the federal government should develop a system of regular audits and reconciliation of IPPIS data by the federal government authorities to ensure accuracy and detect potential fraudulent attempts.

Finally, there is need for improved data management practices to ensure the integrity and security of employee data as the government should ensure that the IPPIS system is highly secured against cybercrime. Also, there should be a robust stakeholder engagement and sensitization to ensure awareness and buy-in for IPPIS.

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