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INTEGRATED PERSONNEL AND PAYROLL INFORMATION SYSTEM (IPPIS) AND FRAUD CONTROL IN FEDERAL PUBLIC SERVICE IN ANAMBRA STATE (2019 - 2023)

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Abstract

The inability of Federal Government of Nigeria to come up with a computerized and accurate Data Management System relating to the staff records of respective Ministries, Departments and Agencies (MDAs), in the times past, has resulted to issues of ghost worker syndrome, reported cases of multiple payments of emoluments to a single employee, falsification of credentials, manual filing system and computation of salaries, as well as other forms of irregularities such as overpayments, underpayments and payment of ghost workers. The objective of this study, therefore, is to determine the impact of Integrated Personnel and Payroll Information System on Fraud Control in the Federal Public Service in Anambra State within the period under study. Data for this study were elicited from both primary and secondary sources. Survey research design was adopted for this study. The population of the study consists of employees of the respective Federal Ministries, Departments and Agencies in Anambra State. This study anchored on Fraud Diamond Theory as a framework for analysis. Findings revealed that Integrated Personnel and Payroll Information System has significantly improved Fraud Control, greatly enhanced Expenses Monitoring and significantly enhanced Financial Oversight in Federal Public Service in Anambra State from 2019 – 2023. In line with these findings, this study concludes that Integrated Personnel and Payroll Information System emerged as a panacea to address the irregularities linked to the traditional method of payroll administration which involves manual computations and avoidable human

errors. It recommends that Federal government, through the Office of the Accountant General of the Federation (OAGF) should activate other six components of IPPIS, aside Payroll which is the only one in use at the moment.

Keywords: Integrated Personnel and Payroll Information System, Fraud Control, Payroll Administration, Expenses Monitoring, Financial Oversight.

Introduction

Nigerian public service is modeled after the British style of public service to render effective services to citizens. For administrative convenience, it is structured into various Ministries, Departments and Agencies (MDAs), as well of a number of Parastatals established by laws and charged with specific functions in the state. In a bid to enhance its performance and capacity to live up to its constitutional roles, a wide-range of administrative reforms, cutting across the prolonged period of military rule and the era of civilian administrations, have been initiated and implemented in the Nigerian public service. It is noteworthy to mention that some laudable reforms took place in the Nigerian Public service from 1999 to date. According to Bureau of Public Service Reforms (BPSR, 2009), Nigeria's vision of the public service reforms of 1999 was to positively transform the service into an ideal, competent, professional, development-oriented, public-spirited, and customer-friendly, having the ability to respond effectively, as well as to exhibit the core values of political neutrality, impartiality, integrity, loyalty, transparency and accountability that was improved upon to the point of being competitively well remunerated and innovative.

Nwambuko, Uchegbue and Omiunu (2022) pointed out that prior to the introduction and adoption of IPPIS in the Nigerian federal public service, there were issues of ghost worker syndrome where a non-existing employee is being paid monthly, reported cases of multiple payments of emoluments to a single employee and credentials were falsified, workers data were kept in paper files, their salaries were calculated manually, and as such, mistakes and fraud in form of overpayment, underpayment and payment of ghost workers always occur. Government of Nigeria does not have the accurate number of civil servants and her budgets were mere estimates. This situation, according to them, created some loop holes and some ministries budgeted more than they required and use the excess for some other things other than payment of salary and allowances, and it is happening at a time when almost every aspect of the world economy is computerized.

The Federal Government of Nigeria, in October 2006, introduced the Integrated Personnel and Payroll Information System initiative as one of the reforms to enhance the effectiveness and efficiency in the storage of personnel records and administration of monthly payroll in such a manner that will boost the confidence of public

servants in the system of staff emolument costs and budgeting. In the opinion of Agbaje and Aladetanye (2021) it is aimed at ensuring a consistent and detailed record-keeping in the federal public service to aid manpower planning, eradicate record of payroll fraud, enable easy storage, bring up-to-date and recover personnel records for administrative and pension procedures, and enable suitable employee salary payment with minimal wastes and leakages. Prior to the introduction of this scheme, Ministries, Departments and Agencies (MDAs) of the federal government received their recurrent costs on monthly basis as subventions from the Consolidated Revenue Fund (CRF). Under this arrangement, the exact number of personnel being paid in the nation cannot be easily ascertained due to non-availability of required and necessary information.

The pilot phase of Integrated Personnel and Payroll Information System implementation in Nigeria was championed and financed by the World Bank in February 2006, upon the approval of the Federal Executive Council (FEC) for the Bureau of Public Service Reforms (BPSR). The IPPIS project started in April 2007 with the enrolment of the seven pilot Ministries, Departments and agencies (MDAs). Initially, it was financed through a World Bank facility of about USD 4.9 million. It was later transferred to the Office of the Accountant General of the Federation in 2008. The seven pilot Ministries were: Federal Ministry of Education, Federal Ministry of Works, Federal Ministry of Finance, Budget Office of the Federation, Federal Ministry of Information and Communication, Ministry of Foreign Affairs, and National Planning Commission (Nwosu, 2010).

Nwambuko, Uchegbue and Omiunu (2022) observed that IPPIS provides a platform for computer application in government payroll management as it calculates each employees monthly basic pay, bonuses, arrears, national housing fund and pension contributions. According to Idris (2018), IPPIS is designed to undertake human resource management activities from recruitment to separation, including payroll and pension processing. In addition, it also facilitates planning; aids budgeting, monitors monthly payment of staff emoluments against what is provided for in the budgets, ensures database integrity; and easy storage, updating and retrieval of personnel records for administrative and pension processes.

According to Kinyeki (2015), IPPIS is designed to make use of modern information and communication technologies to help the government manage the human resource of the public service more efficiently and effectively; provide a reliable and comprehensive database for the public service to facilitate manpower planning; eliminate records and payroll fraud; facilitate easy storage, update and retrieval of personnel records for administrative and pension processes; and facilitate staff remuneration payment with

minimal leakages and wastages. IPPIS and OAGF Report (2019) shows that the Integrated Personnel and Payroll Information System as Information Communications Technology (ICT) based computerized Human Resource and accounting Management Information System project was initiated by the Federal Government of Nigeria and the World Bank. According to World Bank (2020), the purpose of the Integrated Personnel and Payroll Information System is to procure, implement and integrate solution that would improve the effectiveness and efficiency in transactional services, improve the confidence in payroll costs and budgeting, and greatly enhance management reporting and information. This particular arrangement is expected to facilitate the capacity to enhance payroll services within the setting of public service outputs and limits of the government revenues. Mbotor (2019) asserts that the approval of IPPIS by the federal government was largely as a result of stakeholders' pressure, particularly from individuals opposed to corruption.

According to Adeosun (2018), the introduction of the IPPIS had resulted in the reduction of ghost workers syndrome, enforcement of compliance with due process on employment of staff in MDAs and prompt and timely payment of salaries and remittance of third party payments. Similarly, Ahmed, Hamza, Usman and Ahmad (2023) added that the introduction of Integrated Personnel and Payroll Information System to the Nigerian public service has actually reduced corruption by virtually eliminating ghost worker syndrome where applied, thereby reducing the overall cost of governance.

Presently, the personnel costs of the MDAs that have been incorporated in to IPPIS are no longer posted directly into their accounts, rather they are now kept with the Central Bank of Nigeria and this practice has been beneficial to the government as it has reduced personnel cost (Office of the Accountant General of the Federation, OAGF, 2013). More so, the 2015 report of Bureau for Public Service Reform states that the quality of government payroll has vastly improved and MDAs have the necessary information for planning their personnel costs. It is against this backdrop that the study seeks to determine role of Integrated Personnel and Payroll Information System in combating Fraud in the Federal Public Service in Anambra State, as well as its implication for effective financial management in the Nigerian Public Service.

Statement of the Problem

In the past, successive governments have identified gross inadequacies in the payroll and personnel records of the Nigerian public service. This has continued to raise some critical questions relating to the place of accountability, transparency and prudence in the management of public funds. Expectedly, these inadequacies have greatly undermined effective public service delivery in the country. It is pertinent to state that prudent financial management, accountability and transparency are indispensable for effective

service delivery in the public sector organizations. Olunta (2022) pointed out that government had expressed worries about the high cost of its workforce, as the system in place before the implementation of IPPIS made it difficult in planning and budgeting, records containing vital information of personnel disappeared from the staff file, such as birth certificates, declarations of age and even certificates of indigene-ship, were often substituted to obtain undue advantage.

According to Nwosu (2010), IPPIS has a wide range of stakeholders, including those who are directly impacted by the system and those who have an interest in or are influenced by it but are not directly linked to the system. Nwosu further added that IPPIS system custodians, operators, and schedulers; personnel/salary managers at MDAs; and organizations in charge of monitoring IPPIS are also included.

In the words of Bhoi (2017), the exert number of Personnel being paid in the Nation, under the auspices of public servants, cannot be easily ascertained due to non-availability of required and necessary information. The resultant effect of none availability of reliable records showing the exert number of public servants in the country is the challenge of accessing accurate wage data for planning and budgeting purpose. Festus Akanbi, a Special Adviser to Finance Minister, Kemi Adeosun, asserts that prior to the implementation of this reform, the number of ghost workers in the previous years was alarming and berating but IPPIS is only objective for pragmatic solution of ghost workers from the payroll system. For instance, the federal government has recovered 23, 846 non-existent employees from its payroll. Hence, the reduction of salary bill for February 2016 by 2.293 billion naira (10.5 million Euros and to $11.5 million) when compared to December 2015 when the BVN audit process commenced. Okonjo-Iweala and Osafo Kwaako (2007) asserts that at the inception of this reform, a whopping 8000 ghost workers were identified and expunged from government payroll. Quoting El-rufai, Ogunrotifa (2012) noted that it was discovered that 20% of the public service employees were ghost workers.

Bello and Mela (2022) identified the use of "Ghost workers" to perpetuate payroll fraud and divert money to sham identities as one of the most common kinds of corrupt practices in the Nigerian public service. According to Association of Certified Fraud Examiners (2006), a ghost worker is someone recorded on the payroll system, but who does not work for the business. This ghost worker can either be a real person who is placed knowingly or not on the organization's payroll or it could be a factitious person invented by a dishonest employee. They explained further that ghost worker fraud is commonly perpetrated in organization's when the number of employee are large, particularly when the employees are spread out of the headquarters through the field administration across the geographical locations

and payroll operations are less likely to be exposed to such fraud.

Condemning the various forms of irregularities associated with the system, Agboola (2009) stated categorically that corruption is so pervasive in Nigeria that it has turned public service, for many, into a kind of criminal enterprise. Decrying the danger of this anomaly and its possible implication, El-Rufai (2010) pointed out that this malady had eaten deep into the fabrics of the Nigerian public servants, and over time, inefficiency and corruption became rife in the Nigerian public service.

However, the quest to change this disheartening status quo made notable and well meaning Nigerians to have arethink on the way out or way forward via reform of the public service. To this effect, the Nigerian government, in collaboration with World Bank, launched numerous public service reform programs, including modernizing the human resource management and payroll services to counteract the dysfunctional behavior of manual filing systems. These reforms resulted in the creation of the Integrated Personnel and Payroll Information System (IPPIS), a computerized version of the country's manual processes and to serve as an anti-fraud measure.

Anazodo, Ezenwile ,Chidolue, & Umetiti (2014), added that the hallmark of Personnel and Payroll Information System (IPPIS) was to correct the mistakes of the old system, reduce ghost workers as well as ensure that public servants get their pay as at when due.

Notwithstanding the laudable achievements associated with the adoption of the Integrated Personnel and Payroll Information System some issues appear to have constrained the effective implementation of the reform. Firstly, according to the Bureau of Public Service Reforms (BPSR, 2015), some of the most pressing issues include: IPPIS is not yet extensively utilized; Payroll is the only one of the product's seven components that appears to be in use at present. MDAs Service-wide have yet to use the Human Resource modules meant to manage employee registration, posting, promotion, training, punishment, and dismissal. The project's failure may be traced in part to poor project management and the current contractor's inability to deliver on their commitments. An issue with MDAs being unable to connect to the Platform safely and reliably using a Virtual Private Network (VPN) has hampered the launch of IPPIS; the processing of matters related to departure and termination has been delayed because HR modules (retirement, expulsion, passing, and so forth) have not been implemented; and for IPPIS, key control agencies are accountable for a specific area of the scheme.
Secondly, report from the Office of the Accountant General of the Federation showed that most of the IPPIS Desk Officers in the various Ministries, Departments and Agencies (MDAs) of government have not been exposed to the Oracle Training and some of the few that received the

training have been deployed to other MDAs (OAGF, 2020).

Thirdly, there is also the issue of delayed response to complaints and over-centralization of tasks. Here, public servants who are victims of under payment or over payment or complete omission of salary experience severe difficulty in getting their issues addressed. The inability of some public servants working at various hinterlands to get timely remedies to their problems from their respective Desk Officers have compelled a number of them to travel to the Office of the Accountant General of the Federation in Abuja, thus, posing great risks of commuting long distances, while constituting more financial burdens on the coffers of the affected public servants. In Anambra State for instance, The Nation Newspaper (July 28, 2023) Report showed that some employees of Nnamdi Azikiwe University staged a peaceful protest over the non-payment of their four years salaries. The report further stated that they were yet to be captured in the Integrated Personnel and Payroll Information System (IPPIS), since they got their employment letters in 2019.

In the light of the above, the following research questions were formulated to guide the study:

1. How has Integrated Personnel and Payroll Information System improved fraud control in the Federal Public Service of Anambra State from 2019 – 2023?
2. How have Integrated Personnel and Payroll Information System improved expenses monitoring in the Federal Public Service of Anambra State within the period under study?
3. In what ways have Integrated Personnel and Payroll Information System improved financial oversight in the Federal Public Service of Anambra State within the period under study?

Objectives of the Study

The broad objective of this study is to determine the impact of Integrated Personnel and Payroll Information System on Fraud Control in the Federal Public Service of Anambra State within the period under study. While the specific objectives are to:

1. determine the contribution of Integrated Personnel and Payroll Information System to improving fraud control in the Federal Public Service of Anambra State from 2019 – 2023.
2. ascertain the contribution of Integrated Personnel and Payroll Information System improving of expenses monitoring in the Federal Public Service of Anambra State within the period under study.
3. identify ways in which Integrated Personnel and Payroll Information System have improved financial oversight in the Federal Public Service of Anambra State within the period under study.

Conceptual Review

Integrated Personnel and Payroll Information System (IPPIS)

Integrated Personnel and Payroll Information System as Information Communications Technology (ICT) based computerized Human Resource and accounting Management Information System project was initiated by the Federal Government of Nigeria and the World Bank. IPPIS provides a platform for computer application in government payroll management as it calculates each employees monthly basic pay, bonuses, arrears, national housing fund and pension contributions. Omolehinwa and Naiyeju (2019) described IPPIS as a centralized computer based payroll and management system aimed at the elimination of payroll fraud. It has as its focus, the determination of the actual number of personnel and the total cost of salaries at a glance. It is also aimed at ensuring data integrity so that the personnel information is correct and intact. According to Maikudi (2019) IPPIS is a world Bank - assisted project under the Economic Reform and Government Project (ERGP) which was based to establish a reliable and comprehensive database for the public service; facilitate e-manpower planning and assist in providing information for decision making; eliminate double dipping and credentials falsification; facilitate easy storage, update and retrieval of personnel record for administrativeand pension process, and to facilitate staff remuneration payment. It was set up to provide a reliable, comprehensive and centralized database for the public service which will help to reduce government expenditure and overheads, entrench transparency and accountability in the public service human resource records and payroll administration, (Chima, Ahmadu and Folorunsho, 2019).

Fraud Control

Fraud simply denotes any form of financial misappropriation, within an organization or a work environment, for the purpose of personal gain. The most notable form of fraud is the payroll fraud. In the opinion of Nangih and Davies (2017), payroll fraud occurs when names of fictitious employees are added to the payroll.The wages or salaries paid to the ghost workers are then diverted for the beneficiary of the perpetrator. Similarly, Lekubu (2013) explained payroll fraud to mean a situation in which employees take money from an establishment through the payroll illegitimately with the aim of usurping those monies for themselves. Association of Certified Fraud Examiners (ACFE, 2014) and Ruankaew (2016) stated that many organizations lost 5% of income per year due to fraud and until 2013, the gross world product has $ 3.7 trillion of potential losses due to fraud behavior.

Integrated Personnel and Payroll Information System and Fraud Control in the Nigerian Federal Public Service

Integrated Personnel and Payroll Information System is an Eagle's eye that sees farer than the manual file-based system. The vision "To have a

centralized payroll system that meet the needs of FGN employees and helps the Government to plan and manage payroll budget by ensuring proper control of personnel cost" (ippis.gov.ng). It has also facilitated convenient staff remuneration payment with minimal wastage in federal government establishments. It ensures database integrity and security so that personnel information is correct and intact. The remunerations of public servants are paid from recurrent expenditure of government and they are monitored using fiscal policy and in line with the approved budgetary provisions to avoid over spending.

El-Rufai (2011) in Mike (2019) stated that while the public service pay is low relative to thecost of living, the overall burden of payroll as a percentage of the budget is huge. According to Mbotor, (2019), IPPIS has come to stay as a mechanism to curtail mismanagements, misrepresentations and abuse of office in the public sector. He added that prior to the introduction and implementation of IPPIS several challenges have loomed the public sector environment making accountability and transparency difficult to assess in public finances. Ekakirerho and Temile (2017) pointed out that IPPIS provides accurate and reliable personnel information, reduces and eliminates corrupt sharp practices in public offices as well as facilitate modern scientific and accurate government budgeting and forecasting.

According to Ibanichuka, et al (2019) it is used by governments in an attempt to maintain economic growth, high employment and low inflation. Weil (2008), cited in Ibanichuka, et al (2019), observed that fiscal policy is said to be tight or contraction when revenue is higher than spending (government budget in surplus) and loose or expansionary when spending is higher than revenue (budget is in deficit). According to Chima, Ahmadu and Folorunsho (2019), the Federal Government was duty-bound to provide a solution that will get rid of these enormous challenges and save the huge resources in personnel through fraudulent practices characterized by a general lack of accountability. The introduction of the Integrated Personnel and Payroll Information System (IPPIS) in 2007 has been viewed as part of government efforts to reduce these inadequacies.

Haruna, Joseph and Samson (2015) collaborated that the massive financial losses occasioned by payroll fraud through the use of ghost workers are gradually being discovered and eliminated by reason of the introduction of IPPIS. In this regard, more money have been saved in the public coffers which is been used to enhance overhead and capital releases to the Ministries Departments and Agencies. According to reports of the Bureau of Public Service Reforms (2015), 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. Furthermore, it reduced the red tape involved in manual payroll administration (BPSR, 2015).

According to the Director of IPPIS, there is ongoing synergic agreement with states government to domesticate IPPIS to further uncover ghost workers at the state level thereby reducing the burden of personnel cost wastage. Enakirerhi and Temile (2017) foresee futuristic prospects of IPPIS, to include it serving as a platform for future scientific overhead budgeting. This plan, if well-implemented, will aid the government in accurately budgeting for personnel cost. Furthermore, being an aid for future statistics and database reference assisting in gathering reliable data on employment rate. It will serve as a data bank to the government about its citizenry and more so, reduce cost of governance.

Integrated Personnel and Payroll Information System and Expenses Monitoring in the Nigerian Federal Public Service

The introduction and adoption of Integrated Personnel and Payroll Information System was aimed at curbing financial leakages, as well as to ensure prudence and accountability in the management of public funds. Oguzierem, Sofiri and Okodudu (2017) maintained that in recent times, the Nigeria Federal Government through the introduction of biometrics applications uncovered that it was wastefully making payment running in billions of Naira to illegitimate workers. Folorunsho (2017) in Chima and Folorunsho (2020) identified inaccurate computation of salary as the resultant effect of manual computation of personnel information and salary administration in the Nigerian Federal Civil Service. This, according to them, has led to over payment, underpayment, the omission of staff name in payment, wrong calculation of promotion and pension, easy manipulation of personnel records, unreliable data for human resource planning and management, as well as other forms of payroll and credential-related fraud which Integrated Personnel and Payroll Information System has corrected.

Okoye and Gbegi (2013) opined that the failure of Internal Auditing System of the organization in detecting fraudulent practices has led to the use of specialized procedures to detect fraud, collectively known as forensic auditing. Obinna (2013) noted that, there is collaboration within the system that enhances the operation of payroll fraud. For example, a top official of government must approve wage payment, another official must audit the pay vouchers for another official to pay the salary. The collaboration appears to have paralyzed the possibility of apprehending the culprits and encouraged the fraud.

The National Identity Management Commission (NIMC) uncovered 4,000 ghost workers in December 2011. Recently, 78,315 ghost personnel were revealed in the Nigerian Police Force, (Mbotor, 2019). According to Micah and Moses (2018), the Federal government in July, 2013

identified 46,821 ghost workers in 215 MDAs implementation of IPPIS. The list goes on unending of the several discoveries made in MDAs of ghost workers and excessive payment of salaries and other benefits. The side effect of payroll fraud on the economic development of the State is debilitating.

Effiong, Oro, Ogar, Imong, Etop and Iroushu (2017) maintained that IPPIS has helped to curb red tape associated with the manual payroll administration, improved effectiveness and efficiency in government transactions, stalled corruption involved in personnel cost management, as well as reduced personnel costs through the elimination of 60,450 ghost workers from the system, released funds for improved infrastructural development and broadened employment opportunities in the public sector. Micah and Moses (2018) opined that IPPIS has significantly reduced fraud-related activities in the Nigerian public service, adding that Ministries, Departments and Agencies are yet to establish private virtual network connection to the IPPIS platform. Published reports showed that from 2007 to 2019, IPPIS implementation in MDAs, NPF and other paramilitary agencies has saved the government over ₦ 600 billion (Ahmed, 2019).

Integrated Personnel and Payroll Information System and Financial Oversight in the Nigerian Federal Public Service

A number of government departments and agencies have been assigned to act as control agencies. Essentially, they are to carefully examine the information generated from IPPIS before they exert some measures of control as a way of putting checks and balances into the system. Their work is to make sure that the information recorded is consistent and if not, alarm is raised. The control agencies can effectively plan, monitor and control information flow with comprehensive database of personnel records. They make sure that they monitor the performance of IPPIS to bring about the desired gains for which it was implemented is achieved. The control Agencies includes the following: Office of the Head of Service of the Federation (OHCSF), Budget Office (BOF), Office of the Auditor General for the Federation (OAGF), Central Bank of the Nigeria (CBN) (Flag off and Sensitization of IPPIS, February 7, 2011).

Public Service Institute of Nigeria, (2011) Report showed that the federal government of Nigeria in October 2006, embraced the Integrated Personnel and Payroll Information System (IPPIS) to provide a reliable and comprehensive database for the public service to address ghost workers syndrome, facilitate human resource planning, eliminate manual record and payroll fraud, facilitate easy storage, update and retrieve personnel records for administrative and pension processes, and facilitate convenient staff salary administration payment with minimal waste and financial leakages.

Available data from the agency‘s website shows that IPPIS department carries out its functions in

collaboration with; the Federal Ministry of Finance, Office of the Head of Service, Civil Service Commission, Office of the Auditor General of the Federation, other MDAs that are enrolled on the program and some third party public and private establishments. An Acting Director in the office of the Accountant General of the Federation, is responsible for the overall management of IPPIS. (https://www.ippis.gov.ng/what-is-3/).

Idris, Adaja and Audu (2015) added that IPPIS implementation ensured and would ensure virile economy through enhanced productivity and save billions of Naira in personnel cost through wastage elimination. Asishana (2020) pointed out that as at February 1, 2020, the federal government of Nigeria, has through the implementation of IPPIS reform, discovered about 60,000 ghost workers. Similarly, World Bank Report (2014) showed that the central government made a monthly net savings of N116m in the first seven pilot MDAs since the implementation of the scheme in 2006. By 2019, over N500b was reported to have been saved by the government through the implementation of the payment system (Emejo, 2019).

According to Usman and Ahmad (2023), IPPIS has an inbuilt mechanism to detect ‘’ghost workers’’ and is based on verified aims and estimates. Consequently, it will broaden employment opportunities, reduce corruption in the public service and reduced personnel costs. As part of the measures to ensure effective implementation of the scheme, IPPIS captures facial images, finger prints and other relevant data of federal government employees, and stores them in a digital data-based library which can be accessed with authorization anywhere and at any time (Enakirerhi and Temile, 2017, Olayinka and Adiga, 2015).

Empirical Review

Agboola (2018) investigated the strategies adopted by Integrated Personnel and Payroll Information System (IPPIS) in addressing Ghost Worker Syndrome in the Nigerian Public Sector, with particular reference to the challenges faced in the implementation of the IPPIS policy in the Federal Inland Revenue Service in Nigeria. Both primary and secondary sources of data were employed to elicit the opinions of public servants in the Federal Inland Revenue Service (FIRS). Findings revealed that the introduction of IPPIS policy into the salary administration in Nigeria has resolved the problem of ghost workers and improved constant payment of employees.

Hamza and Ahmed (2018) conducted a study titled: ‘The Impact of Integrated Personnel and Payroll Information System (IPPIS) and Bank Verification Number (BVN) in eliminating Payroll Fraud and Corruption, in the Management of Personnel Costs in Local Governments Areas of Gombe state’. The study employed survey research design in which primary data were collected from 103 respondents. Data collected were

analyzed using descriptive statistics and Chi square was used to test the hypotheses formulated. Findings show that integration of BVN and IPPIS will aid in eliminating payroll fraud and corruption, thus, resulting in efficiency and transparency in management of personnel costs in the selected local government areas of Gombe state.

Abdulsalam et al (2020) investigated the Effect of Integrated Personnel and Payroll Information System (IPPIS) on Transparency in Government Payroll Administration in Nigerian Civil Service. The study adopted descriptive cross sectional survey research design. A total number of 100 Treasury Staff of the Office of Accountant General of The Federation Working at Federal Pay Office, Sokoto and Federal Pay Office Birnin Kebbi formed the population of the study. Data for the study were collected and analyzed using descriptive and inferential statistics with the aid of Statistical Package for the Social Sciences (SPSS) Version 21. Findings revealed that there exist a significant positive relationship between IPPIS, Transparency and Accountability. It recommends the need on the part of government to strengthen internal control mechanism of IPPIS as a measure of fraud control, as well as the need for compliance with the provisions of Financial Regulations and the Civil Service Rules.

Idris, Adaja and Audu (2020) conducted a study titled: 'Integrated Personnel Payroll and Information System(IPPIS) A Panacea for Ghost Workers Syndrome in Nigeria Public Service'. Data for the study were gathered from both primary and secondary sources. Data collected were analyzed using the simple percentage, frequency table, mean scores and spearman rank order correlation technique. Findings from the study show that ghost worker syndrome is highly detrimental to public revenue. It recommended that integrated personnel payroll and information system should be adopted in the public service to ensure a virile economy and enhance productivity.

Enakirerhi and Temile (2022) studied Integrated Personnel and Payroll Information System (IPPIS) in Nigeria with particular reference on the challenges associated with the implementation of IPPIS, benefits derived from IPPIS if fully implemented, as well as the possible prospects. The study employed both primary and secondary data. Conclusion shows that the future looks bright with IPPIS implementation set to serve as platform for budgeting projection and planning, acts as database for national statistics and enable reduction in governance cost.

Theoretical Framework

This study is anchored on the 'Fraud Diamond Theory' envisioned by Wolfe and Hermanson (2004) as a framework for analysis. Corporate frauds are committed individuals against the organizations that employed them. This theory maintained that fraud occurs as a result of four factors: Pressure, Opportunity, Capability and Rationalization. According to Wolfe and

Hermanson (2004), most frauds would not occur without the right person with the right ability to carry out the fraud. Furthermore, the right person will have to observe and take advantage of an "Opportunity to commit the fraud considering that and incentive and rationalization can draw the person toward it. But the person must have the capability to recognize the open doorway as an opportunity and to take advantage of it by walking through,not just once, but time and time again.

Tenets/Assumptions of the Theory

Wolfe and Hermanson (2004) outlined the assumptions of 'Fraud Diamond Theory' as follows:

- Fraud is impossible without the key elements, namely: perceived pressure, opportunity, and rationalization.
- The severity of fraud depends on the strength of each element.
- Although perceived pressures or incentives may exist along with opportunities and rationalizations, fraud is not possible unless the fourth element (capacity) is present.
- Many frauds will not occur without the right people with the right ability to commit fraud.
- Fraud behavior usually arises from the pressure obtained by employees in an organization.

Application of the Theory to the Study

Most of the factors identified by Wolfe and Hermanson (2004) are present in the public service fraud environment in Nigeria. Fraudulent activities in public service are mostly perpetrated by government officials who ordinarily are supposed to ensure compliance with the ethics of public financial management. This is made possible through the existence of loopholes inherent in the hitherto existing manual method of payroll administration. Consistent with Hermanson's assertion, public servants of managerial cadre who perpetrate fraud are always guided by the four factors, namely: Pressure, Opportunity, Capability and Rationalization.

Hypotheses

The following hypotheses have been formulated to guide this study:

1. Integrated Personnel and Payroll Information System has significantly improved fraud control in the Federal Public Service of Anambra State from 2019 – 2023.
2. Integrated Personnel and Payroll Information System has greatly improved expenses monitoring in the Federal Public Service of Anambra State within the period under study.
3. Integrated Personnel and Payroll Information System has significantly improved financial oversight in the Federal Public Service of Anambra State through periodic audits.

Research Design

Survey research design was adopted for this study. This method of data collection was chosen

because it allows the researcher to seek information that may not be available in secondary data sources such as journals, textbooks, website publications etc.

Population of the Study

The population of this study consists of employees of the respective Federal Ministries, Departments and Agencies in Anambra State as at 2023.

Sampling Technique

Purposive Sampling Technique was adopted to elicit requisite information from respondents who are well-informed about the subject matter of the study. The study was carried out using the responses from the Sixteen (16) interviewees in which four (4) respondents each were selected from Federal Inland Revenue Service, Federal Road Safety Commission, Nigerian Immigration Service and Nnamdi Azikiwe University Awka respectively.

Sources and Method of Data Collection

Data for this study were elicited from both primary and secondary sources. The primary sources of data for this study will be obtained from Key Informant Interviews. On the other hand, the secondary sources of data for this study were obtained through critical review of relevant literature and materials from text books, internet sources, journals, official reports, workshops and seminar papers.

Validity of Instrument

The interview guide was validated by three experts in the field of Public Finance Management. Their observations, suggestions and comments added value to the study, and they were used in the final draft of the instrument.

Reliability of Instrument

To determine the reliability of the interview guide, the 'test-retest technique' was adopted. The instruments were administered on a pilot sample drawn from five (5) aware members of the public, all of whom are employees of the Federal Public Service in Anambra State. The pre-tests were carried out on two occasions with the interview guide, in an attempt to ascertain the reliability of the research instrument.

Method of Data Presentation and Analysis

Thematic approach was adopted in analyzing the responses of interviewees. To validate the hypotheses, the study adopted one sample t-test on a 5% significance level and with the aid of STATA 14.2.

Findings and Discussion

The study was carried out using the responses from the sixteen (16) interviewees which were thematically grouped according to their relatedness. The study therefore carefully presented the findings and discussion of the study under the following sub-headings: 3.1 Demographic analyses of respondents; 3.2 Analysis of research questions; and 3.3 Test of hypotheses.

Descriptive Statistics of Respondents by Organization

The study presented cross tabulation analysis to describe the respondents according to their respective organizations.

Table 3.1: Gender * Organization Cross-tabulation

Gender	Organization FIRS	FRSC	Immigration	UNIZIK	Total
Female	3	0	1	3	7
	75.00	0.00	25.00	75.00	43.75
Male	1	4	3	1	9
	25.00	100.00	75.00	25.00	56.25
Total	4	4	4	4	16
	100.00	100.00	100.00	100.00	100.00

Source: STATA 14.2/Field survey, 2023

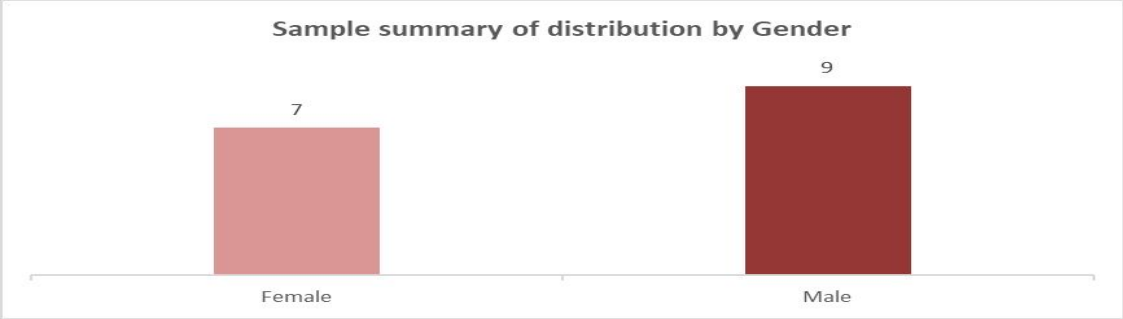


Table 3.1reveals the cross-tabular descriptive statistics of interviewees. The percentages within each row represent the distribution of gender within each organization. For instance, in FIRS, 75% of individuals are Female, and 25% are Male. The percentages within each column represent the distribution of organizations within each gender. For instance, among Females, 43.75% are in FIRS, 0% in FRSC, 25% in Nigerian Immigration, and 75% in UNIZIK.

More so, the percentages in the "Total" row and column represent the overall distribution across all categories. For instance, the total percentage of Females is 43.75%, and the total percentage of Males is 56.25%.Summarily, the table revealed that within the FIRS organization, 75% of individuals are Female, and 25% are Male; In FRSC, all individuals are Male; In the Nigerian Immigration, 25% are Female, and 75% are Male while in UNIZIK, 75% are Female, and 25% are Male. This table therefore provides a clear overview of the gender distribution within each organization and the overall distribution across all organizations.

Table 3.2:Cadre * Organization Cross-tabulation

Cadre	Organization FIRS	FRSC	Immigration	UNIZIK	Total
Junior staff	0	1	0	0	1
	0.00	25.00	0.00	0.00	6.25
Senior staff	3	3	4	4	14
	75.00	75.00	100.00	100.00	87.50
Management staff	1	0	0	0	1
	25.00	0.00	0.00	0.00	6.25
Total	4	4	4	4	16
	100.00	100.00	100.00	100.00	100.00

Source: STATA 14.2/Field survey, 2023

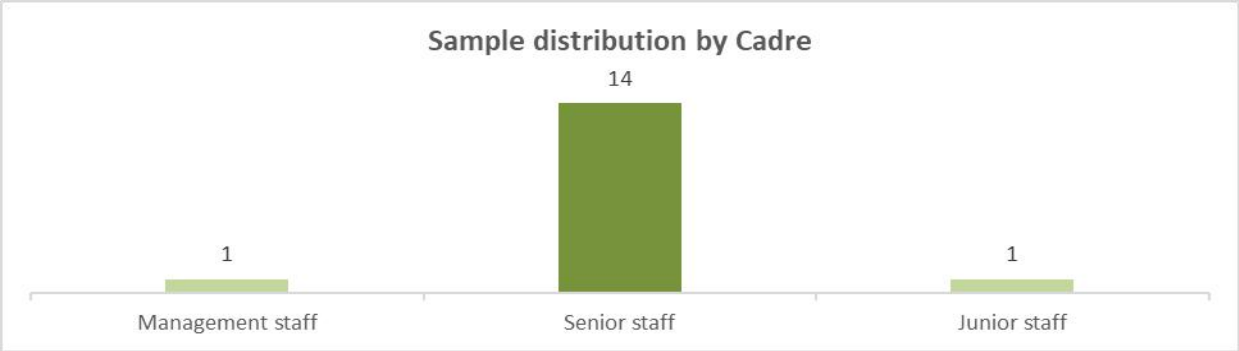


Table 3.2 and visualization from our histogram showed an unequal spread between the male and female interviewees with respect to professional cadre. The percentages within each row represent the distribution of cadres within each organization. For example, in FIRS, 0% are Junior staff, 75% are Senior staff, and 25% are Management staff. The percentages within each column represent the distribution of organizations within each cadre. For instance, among Junior staff, 0% are in FIRS, 25% in FRSC, 0% in Nigerian Immigration, and 0% in UNIZIK. The percentages in the "Total" row and column represent the overall distribution across all categories.

Summarily, in FIRS, 75% of individuals are Senior staff, and 25% are Management staff. There are no Junior staff in FIRS; in FRSC, 25% of individuals are Junior staff, and 75% are Senior staff. There are no Management staff in FRSC; in the Nigerian organization, 100% of individuals are Senior staff. There are no Junior or Management staff in the Nigerian organization while in UNIZIK, 100% of individuals are Senior staff. There are no Junior or Management staff in UNIZIK.Table3.2therefore provides insights into

the distribution of different cadres within each organization and the overall distribution across all organizations.

Analysis of Research Questions

Research question one: How has Integrated Personnel and Payroll Information System improved Fraud Control in the Federal Public Service of Anambra State from 2019 - 2023?

Table 3.3: **Thematic analysis for research question one**

SN	Investigative question	Thematic response	Agreed%	Disagree%
1	What was the nature of payroll fraud in the Federal Public Service in Anambra State before the introduction of IPPIS?	*Irregularities, ghost workers, over payments, unauthorized allowances.*	81.25%	18.75%
2	How has the Integrated Personnel and Payroll Information System improved Fraud Control in Federal Public Service in Anambra State within the period under study?	*Biometric verification of employees, real-time verification of employee attendance and verification of allowances.*	68.75%	31.25%
3	What are the constraints to effective Fraud Control in the Federal Public Service in Anambra State through the implementation of Integrated Personnel and Payroll Information System?	*Lack of adequate funding, inadequate capacity of staff, inadequate infrastructure*	93.75%	6.25%
	Grand Mean (x)		***81.25%***	***18.75%***

Source: Field survey, 2023

Table 3.3 shows the thematic analysis of research question one concerning how Integrated Personnel and Payroll Information System has improved Fraud Control in the Federal Public Service of Anambra State from 2019 – 2023which indicated from the grand mean that 81.25% percent of the interviewees commented similarly with the thematic response while only 18.75% of the entire interviewees commented outside the thematic response. Based on the majority response of the interviewees from the four distinctive organizations in our population, the study can conclude therefore that Integrated Personnel and Payroll Information System has significantly improved Fraud Control in the Federal Public Service of Anambra State from 2019 – 2023.

Research question two: How has Integrated Personnel and Payroll Information System enhanced expenses monitoring in the Federal Public Service of Anambra State within the period under study?

Table 3.4: **Thematic analysis for research question two**

SN	Investigative question	Thematic response	Agreed%	Disagree%
1	What are the major factors responsible for increased expenditure in the Federal Public Service in Anambra state prior to the adoption of IPPIS?	*Inefficient management and misappropriation of fund.*	87.50%	12.50%
2	How has increased expenditure affected the overall performance of Federal Public Service in Anambra?	*There is a negatively impact on its overall performance*	37.50%	62.50%
3	In what ways have the Integrated Personnel and Payroll Information System improved expenses monitoring in the Federal Public Service in Anambra State within the period under study?	*IPPIS has helped to centralize and streamline payroll processing, making it easier to monitor and control fraudulent activities*	50.00%	50.00%
	Grand Mean (x)		***64.06%***	***35.94%***

Source: Field survey, 2023

Table 3.4 shows the thematic analysis of research question two concerning how Integrated Personnel and Payroll Information System has enhanced expenses monitoring in the Federal Public Service of Anambra State within the period under study. The analysis indicated from the grand mean that 64.06% percent of the interviewees had similar comments and stood in agreement with the thematic response while 35.94% of the entire interviewees commented outside the thematic response. Based on the majority response of the interviewees from the four distinctive organizations in our population, the study can conclude therefore that Integrated Personnel and Payroll Information System has enhanced expenses monitoring in the Federal Public Service of Anambra State within the period under study.

Research question three: In what ways have Integrated Personnel and Payroll Information System enhanced financial oversight in the Federal Public Service of Anambra State within the period under study?

Table 3.5: **Thematic analysis for research question three**

SN	Investigative question	Thematic response	Agreed%	Disagree%
1	How has IPPIS enhanced financial reporting in Federal Public Services in Anambra state?	*Increased accountability*	43.75%	56.25%
2	How has Integrated Personnel and Payroll Information System	*By making the system difficult and precarious*	87.50%	12.50%

	guided authorization and approval of funds in the Federal Public Service in Anambra State within the period under study?			
3	In what ways have the Integrated Personnel and Payroll Information System regulated expenditures in the Federal Public Service in Anambra State?	*IPPIS has helped to ensure that all expenditures are properly approved and that the authorization system is difficult to manipulate.*	75.00%	25.00%
	Grand Mean (x)		***71.88%***	***28.13%***

Source: Field survey, 2023

Table 3.5 shows the thematic analysis of research question one concerning the ways Integrated Personnel and Payroll Information System has enhanced financial oversight in the Federal Public Service of Anambra State within the period under study. The thematic analysis thus indicated from the grand mean that 71.88% percent of the interviewees responded in line with the thematic response while only 28.13% of the entire interviewees commented outside the thematic response. Based on the majority response of the interviewees from the four distinctive organizations in our population, the study therefore concluded that Integrated Personnel and Payroll Information System has enhanced financial oversight in the Federal Public Service of Anambra State within the period under study in various ways.

Test of Hypotheses

Hypothesis one

H_1: Integrated Personnel and Payroll Information System has significantly improved Fraud Control in the Federal Public Service of Anambra State from 2019 – 2023.

Table 3.6: One sample t-test for hypothesis one

```
One-sample t test
------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
Themat~1 |      16     10.0625    .4327119    1.730848    9.140196     10.9848
------------------------------------------------------------------------------
    mean = mean(Thematic_Response_cluster1)                       t =  17.4770
Ho: mean = 2.5                                 degrees of freedom =       15

   Ha: mean < 2.5               Ha: mean != 2.5                 Ha: mean > 2.5
 Pr(T < t) = 1.0000         Pr(|T| > |t|) = 0.0000          Pr(T > t) = 0.0000
```

Source: STATA 14.2

Table 3.6 reveals the descriptive statistics which give an overview of the central tendency (mean) and variability (standard error and standard deviation) of the Thematic Response in Cluster 1. The confidence interval provides a plausible range for the true population mean.

The mean (average) thematic response in Cluster 1 is 10.0625 while the standard error which measures the precision of the sample mean estimate is 0.4327119. A smaller standard error indicates a more precise estimate. Table 3.6 also revealed the standard deviation which is 1.730848. This provides a measure of the amount of variation or dispersion in the data. A larger standard deviation indicates greater variability and a small standard deviation indicates otherwise. The 95% confidence interval for the mean Thematic Response in Cluster 1 is (9.140196, 10.9848). This interval suggests that we are 95% confident that the true population mean falls within this range.

Furthermore, Table 3.6 revealed the t-statistics of 17.4770 and p-value of 0.000 (P-value < 0.05). The p-value is very close to zero, indicating strong evidence against the null hypothesis. The result therefore suggests that the mean of "Thematic Response Cluster 1" is significantly different from 2.5, providing evidence to reject the null hypothesis and conclude that Integrated Personnel and Payroll Information System has significantly improved Fraud Control in the Federal Public Service of Anambra State from 2019 – 2023.

Hypothesis two

H_2: Integrated Personnel and Payroll Information System has greatly enhanced expenses monitoring in the Federal Public Service of Anambra State within the period under study.

Table 3.7: One sample t-test for hypothesis two

```
One-sample t test
------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
Themat~2 |      16      8.3125    .5606451     2.24258    7.117513    9.507487
------------------------------------------------------------------------------
    mean = mean(Thematic_Response_cluster2)                       t =  10.3675
Ho: mean = 2.5                                  degrees of freedom =       15

   Ha: mean < 2.5               Ha: mean != 2.5                 Ha: mean > 2.5
 Pr(T < t) = 1.0000         Pr(|T| > |t|) = 0.0000          Pr(T > t) = 0.0000
```

Source: STATA 14.2

Table 3.7 shows the descriptive statistics which give an overview of the central tendency (mean) and variability (standard error and standard deviation) of the Thematic Response in Cluster 2. The confidence interval provides a plausible range for the true population mean.

The mean (average) thematic response in Cluster2 is 8.3125 while the standard error which measures the precision of the sample mean estimate is 0.5606451. Table 3.6 also revealed the standard deviation which is 2.2458 which provides a measure of the amount of variation or dispersion in the data. The 95% confidence interval for the mean Thematic Response in Cluster 2 is (7.117513, 9.507487). This interval suggests that we are 95% confident that the true population mean falls within this range.

More so, Table 3.7 revealed the t-statistics of 10.3675 and p-value of 0.000 (P-value < 0.05). The p-value is very close to zero (0), indicating strong evidence against the null hypothesis. The result therefore providing evidence to reject the null hypothesis and conclude that Integrated Personnel and Payroll Information System has greatly enhanced expenses monitoring in the Federal Public Service of Anambra State within the period under study.

Hypothesis three

H_3: Integrated Personnel and Payroll Information System has significantly enhanced financial oversight in the Federal Public Service of Anambra State through periodic audits.

Table 3.8: One sample t-test for hypothesis three

```
One-sample t test
------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
Themat~3 |      16       8.625    .6637959    2.655184    7.210153    10.03985
------------------------------------------------------------------------------
    mean = mean(Thematic_Response_cluster3)                       t =   9.2272
Ho: mean = 2.5                                 degrees of freedom =       15

   Ha: mean < 2.5               Ha: mean != 2.5                 Ha: mean > 2.5
 Pr(T < t) = 1.0000         Pr(|T| > |t|) = 0.0000          Pr(T > t) = 0.0000
```

Source: STATA 14.2

Table 3.8 shows the descriptive statistics which give an overview of the central tendency (mean) and variability (standard error and standard deviation) of the Thematic Response in Cluster 3. The confidence interval provides a plausible range for the true population mean. The mean (average) thematic response in Cluster 3 is 8.625 while the standard error which measures the precision of the sample mean estimate is 0.664. Table 3.6 also revealed the standard deviation which is 2.266 which provides a measure of the amount of variation or dispersion in the data. The 95% confidence interval for the mean Thematic Response in Cluster 3 is (7.210, 10.040). This interval suggests that we are 95% confident that the true population mean falls within this range.

More so, Table 3.8 revealed the t-statistics of 9.227 and p-value of 0.000 (P-value < 0.05). The p-value is very close to zero (0), indicating strong evidence against the null hypothesis. The result therefore providing evidence to refute the null hypothesis and conclude that Integrated Personnel and Payroll Information System has significantly enhanced financial oversight in the Federal Public Service of Anambra State through periodic audits.

Discussion of Findings

The study focused on Integrated Personnel and Payroll Information System and fraud control in Federal Public Service particularly in Anambra state, Nigeria while examining various empirical studies on the subject matter. The study thus revealed from the hypotheses testing that Integrated Personnel and Payroll Information System has significantly improved Fraud Control in the Federal Public Service of Anambra State from 2019 – 2023. This finding aligns with Nwosu's (2010) research, which indicated that proper implementation of Integrated Payroll and Personnel Information System significantly eliminates payroll fraud, reducing government recurrent expenditure. Similar positive impacts were noted by Osisioma, Cletus, and Okafor (2016), who found a significant difference in

government's recurrent expenditure following the introduction of IPPIS. The positive results are consistent with the broader literature emphasizing the effectiveness of IPPIS in improving financial processes (Sunday et al., 2017; Agboola, 2018; Hamza & Ahmed, 2018).

More so, the study found that Integrated Personnel and Payroll Information System has greatly enhanced expenses monitoring in the Federal Public Service of Anambra State within the period under study. The outcome supports Hamza and Ahmed's (2018) findings that integration of BVN and IPPIS aids in eliminating payroll fraud and corruption, resulting in efficiency and transparency in personnel cost management. The conclusion echoes the sentiments of Micah and Moses (2018), who asserted that IPPIS has reduced the incentive, capacity, and opportunity for fraudulent individuals to perpetrate payroll fraud. The positive relationship between IPPIS and fraud management found by Sunday et al. (2017) also corroborates this result.

Furthermore, the study found that Integrated Personnel and Payroll Information System has significantly enhanced financial oversight in the Federal Public Service of Anambra State through periodic audits. This outcome was also found to align with the findings of Abdulsalam et al. (2020), who reported a significant positive relationship between IPPIS, transparency, and accountability. This supports the argument that IPPIS strengthens internal control mechanisms, aiding in fraud control (Abdulsalam et al., 2020). The positive impact on financial oversight is consistent with the broader literature emphasizing the role of IPPIS in addressing challenges like ghost worker syndrome (Micah & Moses, 2018; Idris, Adaja, & Audu, 2020).

The study's findings are in harmony with existing empirical research, affirming the positive impact of Integrated Personnel and Payroll Information System (IPPIS) in various dimensions, including fraud control, expenses monitoring, and financial oversight. The literature consistently supports the idea that IPPIS contributes to reducing fraud, improving financial processes, and ensuring transparency and accountability in public sector payroll administration.

A critical evaluation of the findings from the current study and prior studies also points that while the majority of the literature supports the positive effects of IPPIS, challenges such as technological barriers, the need for training, and issues with monthly salary uploads still persist (Micah & Moses, 2018; Olumuyiwa, 2018). Therefore, ongoing efforts to address these challenges will be crucial for maximizing the benefits of IPPIS implementation (Enakirerhi & Temile, 2022).

Summary

The study investigated the effect of Integrated Personnel and Payroll Information System on fraud control. Precisely, the study addressed the core issues relating to IPPIS in Anambra state chapter of Federal public service as prior studies

have considered this as indispensable discussion for any meaningful sustainable development to payroll administration. The findings emanating from the study is therefore summarized as thus:

1. Integrated Personnel and Payroll Information System has significantly improved fraud control in Federal Public Service of Anambra State from 2019 – 2023 ($P < 0.05$)
2. Integrated Personnel and Payroll Information System has greatly enhanced expenses monitoring in Federal Public Service of Anambra State within the period under study ($P < 0.05$).
3. Integrated Personnel and Payroll Information System has significantly enhanced financial oversight in Federal Public Service of Anambra State through periodic audits ($P < 0.05$).

Conclusion

There are a number of observable gross inadequacies associated with the payroll and personnel records of the Nigerian public service which have continued to undermine effective accountability, transparency and prudence in the management of public funds, particularly in the Federal Public Service of Anambra State. In the light of the above, the Integrated Personnel and Payroll Information System (IPPIS) emerged as a panacea to address the irregularities linked to the traditional method of payroll administration which involves manual computations and avoidable human errors. But, notwithstanding the shortcomings of IPPIS, and consistent with the findings, the study concludes as follows: Firstly, Integrated Personnel and Payroll Information System has significantly improved fraud control in the Federal Public Service of Anambra State from 2019 – 2023. Secondly, Integrated Personnel and Payroll Information System has greatly enhanced expenses monitoring in the Federal Public Service of Anambra State within the period under study. Finally, Integrated Personnel and Payroll Information System has significantly enhanced financial oversight in the Federal Public Service of Anambra State through periodic audits within the period under study.

Recommendations

Arising from the findings and conclusion, the study makes the following recommendations:

1. There is need on the part of federal government to ensure that all IPPIS Desk Officers in the various Ministries, Departments and Agencies (MDAs) undergo a compulsory Oracle Training, aimed at enhancing effective implementation of the centralized payroll reform.
2. Federal government, through the Office of the Accountant General of the Federation (OAGF) should activate other six components of IPPIS, aside Payroll which is the only one in use at the moment.
3. Federal government, through the relevant agencies should commence the implementation of Human Resource modules meant to manage employee registration,

posting, promotion, training, punishment, and dismissal, as well as to accommodate other peculiarities like the case of the university system.

References

Abdulsalam Nasiru, Kaoje, Kabir, Nabila, Sani, Idris, Jafaru Abdu, Gambarawa, and Lawal Ibrahim Ubandawaki. (2020). Integrated Personnel and Payroll Information System (IPPIS) and Transparency in Government Payroll Administration in Nigerian Civil Service: A Unique Approach. *Asian Journal of Economics, Business and Accounting* 19(3): 1-8, 2020; Article no.AJEBA.61704 ISSN: 2456-639X.

Adeosun, K. (2018). *FG Saves N68Bn on Personnel Cost, Captures 511 MDAs under IPPIS.* Lagos: The Sun News Paper.

Agbaje, W., and Aladetanye, T., (2021). Integrated Personnel and Payroll Information System (IPPIS) and Government Recurrent Expenditure in Nigeria. *International Journal of Business Administration and Business Economics Vol. 17 (6)*

Agboola, T. (2018). Effeciveness of Integrated Personnel and Payroll Information System in Addressing Ghost Workers Sydrone in Nigeria Public Sector. *Global Journal of Human - Social Science - H interdisciplinary Vol. (18) Issue 2*

Ahmed, I., Hamza, M., Usman, F., and Ahmad, G. (2023). An Evaluation of Integrated Personnel and Payroll Information System (IPPIS) Effectiveness and Implementation in Gombe State

Anazodo, R. O., Ezenwile, U., Chidolue, D. N., & Umetiti, C. (2014). The effect of new pension scheme on retirees in Nigeria: 2004–2014. *Review of Public Administration and Management, 3*(6), 180–190. Retrieved from http://www.arabianjbmr.com/RPAM_index.php

Asishana, J., (2020), IPPIS uncovers 60,000 ghost workers in FG payroll – Minister. Retrieved from The Nation Newspapers on Saturday, 18th July, 2020 from https://thenationonlineng.net/ippis-uncovers-60000-ghost-workers-in-fg-payroll-minister/

Association of Certified Fraud Examiners, (2018). Report to the Nations on Occupational Fraud and Abuse. Retrieved from http://www.acfe.com/rttn/docs/2014-report-to-nations.pdACFE, 2008. Report to The Nation on Occupational Fraud and Abuse (On-line), 2006. Accessed on March 20, 2018.

Bello, F., and Mela, K. (2022). IPPIS Policy and the Challenges of its Implementation in the Nigerian Universities: A Conceptual Discourse. KIU Journal of Social Sciences, Kampala International University, ISSN: *2413-9580*; 8(3): 53- 62

Bureau of Public Service Reforms (BPSR) (2015).Key Challenges of IPPIS - Public Service Reforms in Nigeria (1999-2014).Available@http://bpsr-nigeria.blogspot.com/2015/11/key-challenges-of-ippis-public-service.html.

Chima, P., Ahmadu, J., and Folorunsho, O.G. (2019). Implementation of Digital Integrated Personnel and Payroll Information System: Lesson from Kenya, Ghana and Nigeria. *Governance and Management Review (GMR) Vol.4, No. 2, July-Dec 2019*

Emejo, J., (2019), FG Saves N500bn on IPPIS Implementation. Retrieved from This Day, on Saturday, 18th July, 2020 from https://www.thisdaylive.com/index.php/2019/04/30/fg-saves-n500bn-on-ippis-implementation/

Enakirerhi, L. I. and Temile, S. O. (2017) IPPIS in Nigeria: Challenges, Benefits and Prospects. International Journal of Social Science and Economic Research. Vol.02, Issue: 05, pp. 3490-3497.

Enakirerhi, L., & Temile, S. (2022). IPPIS in Nigeria: Challenges, Benefits and Prospects. *International Journal of Social Science and Economic Research Vol. 2 (5)*

Folorunson G.S (2017). Assessment of the Implementation of the Integrated Personnel and Payroll System in the Office of Accountant General of the Federation, Abuja. Being a Dissertation Submitted for the Award of M.sc, Public Administration, University of Abuja, Abuja-Nigeria. http://unpan1.un.org.

Hamza, M. A, & Ahmed, I. (2018). An Appraisal of Integration of BVN and IPPIS in Eliminating Payroll Fraud and Corruption in Gombe State. *Journal of World Development Studies, Volume(4) No2*

Ibanichuka, E. A. L. et al (2019). Integrated Payroll System and Government Recurrent Expenditure in Nigeria. *International Journal of Advanced Academic Research/Economic Evaluation*/ Vol. 5, Issue 16

Idris, H., Adaja J., & Audu, J.S. (2015). Integrated Personnel Payroll and Information System (IPPIS): Panacea for Ghost Workers Syndrome in Nigerian Public Service. *International Journal of Public Administration and Management Research. 2*(5), 55-64.

Larson A. (2018). *Fraud, Silent Fraud, and Innocent Misrepresentation*. Expert Law. Retrieved 29th May 2018.

Lekubu, B.K (2013). *Issues of Corruption in South Africa's Municipalities*. In Conference Proceedings published by the South African Association of Public Administration and Management (SAAPAM). Aug 15. Department of Public Administration & Management, Tshwane University of Technology.

Maikudi, A. (2019). Assesment of the role of Public Service Reform in Promoting Public Accountablity in Nigeria's Democratic Era (1999-2009. *JORIND 12(1) June* , 85-95.

Manurung, D.T., and Hadian, N (2013). "Detection Fraud of Financial Statement with Fraud Triangle," Proceedings of the 23rd International Business Researcher Conference, Pp. 18-20, 2013

Mbotor, D., (2019). Integrated Personnel and Payroll Information System (IPPIS): The Journey So Far. *International Journal of Business and Management, 7 (7),* July 2019

Mede, F. (2016, May 23). *Nigeria's Experience with Identity Systems for Civil Service Reform*. Paper presented at the ID 4 Africa Annual Meeting, Rwanda.

Mela, K. (2019). The Implementation of IPPIS Policy in the Nigerian Universities: Benefits and Challenges, *Global Journal of Applied Management and Social Sciences (GOJAMSS),* Vol. 17, 201-212.

Micah, L. C., & Moses, T. (2018). IPPIS and the Ghost Workers' Syndrome in Nigeria's Public Sector. *Scholars Journal of Economics, Business and Management,* 773-778

Mike, O. (2019). The plague of ghost workers: Interrogating payroll fraud and executive bureaucratic conspiracy in Nigeria. *Journal of Policy and Development Studies, 12*(1), 81-91.

Nangih, E.,& Davies, D. S. (2017). Biometrics and Bank Verification Number (BVN)technology and ghost workers identification in Rivers State Local Government Areas. *Journal of Harmonized Research in Management,*

3(1), 33-47.Retrieved fromwww.johronline.com.

OAGF, (2013). International Public Sector Accounting Standards. Office of the Accountant General of the Federation, Federal Ministry of Finance. Garki, Abuja.

Oguzierem, U. A., Sofiri, J., & Okodudu, A. S. (2017). Ghost Workers Fraud in Primary and Secondary Education Sector in Bayelsa State: Beyond Financial Loss. *Journal of Public Administration and Social Welfare Research, 2*(2), 53-64.

Okoye, E. I., & Gbegi, D. O. (2013). Forensic accounting: A tool for fraud detection and preventionin the public sector (A study of selected ministries in Kogi State). *International Journal of Academic Research in Business and Social Sciences,* 3(3), 1-19.

Public Service Institute of Nigeria, (2011). Integrated Payroll and Personnel Information System: Public Service Reforms in Nigeria, Abuja: Public Service Institute of Nigeria.

Wolf. D. & Hermanson, D. R. (2004). The fraud diamond, considering four element of fraud. The *CPAJournal,* 74(12), pp. 38-42.

World Bank (2014) Economic Reform and Governance Project Report No: ICR2902.