Integrated Personnel and Payroll Information System (IPPIS) and Transparency in Government Payroll Administration in Nigerian Civil Service: A Unique Approach

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This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT
This paper investigates the effect of Integrated Personnel and Payroll Information System (IPPIS) on transparency in Government Payroll Administration in Nigerian civil service. A descriptive cross-sectional survey research design was used in form of questionnaire administered to illicit information from the respondents, which provides generalized opinions/statistics from the number of individual cases. The population of the study covers 100 Treasury Staff of the Office of Accountant General of The Federation Working at Federal Pay Office, Sokoto and Federal Pay Office Birnin Kebbi. Census was adopted, and as such sampling represents the population. Data was collected and analyzed using descriptive and inferential statistics with the aid of Statistical Package for the Social Sciences (SPSS) Version 21. The findings from test of hypothesis of this paper revealed a significant moderate positive relationship between IPPIS, Transparency and Accountability. Hence, the null hypothesis which states that there is no significant relationship between IPPIS and transparency in government payroll administration in Federal Civil Service in...
Nigeria is rejected and the alternate hypothesis is accepted. The paper recommends that Government should strengthened the internal control mechanism of IPPIS so as to continuously detect and block any loopholes that will give room for fraud as well as carrying out routine Audit and Inspection of the program so as to ensure strict compliance with laid down rules and regulations governing the operation of IPPIS, coupled with compliance with the provisions of Financial Regulations and the Civil Service Rules.

Keywords: IPPIS; government payroll; transparency and Nigerian Civil Service Rules.

1. INTRODUCTION

Integrated Personnel and Payroll Information System (IPPIS) is an integral part of Government Integrated Financial Management Information System (GIFMIS), which is a component of Nigerian Government Economic Reform and Governance Project (ERGP). IPPIS provides an integrated computerized financial package that enhances the effectiveness and transparency of public resource management by computerizing the payroll management and accounting system for the government. IPPIS is generally one of the offshoots of the civil service reform program aimed at ensuring transparency and accountability in the Nigerian civil service by computerizing the manual Payroll System.

One of the biggest problems associated with the manual Payroll System was that government did not know the size of its workforce. Thus, some mischievous workers were collecting salaries from multiple pay points, for fictitious employees and of course workers collecting salaries when they are employed somewhere or not working with government. Therefore, the exact number of Personnel in MDAs being paid by in the Nigerian Federal Government cannot be easily ascertained due to non-availability of required and necessary information. Consequently, it has become difficult for government to have an accurate wage data for planning and budgeting purpose. The IPPIS project seeks to resolve this and also reduce the Federal Government expenditure on Overheads. IPPIS project took off in 2007 with five important functions that include the management of federal staff records; timely and accurate payment of salaries and wages to federal employees; deduction of taxes and other third-party dues; remittance of payroll deductions to third parties; and the enrolment of employees into IPPIS data base [1]. Based on the foregoing, the following research question was ask.

1.1 Research Question

i. Is there any significant relationship between IPPIS and transparency in government payroll administration in Nigerian Federal Civil Service?

This paper is also guided by the following research hypothesis:

1.2 Research Hypothesis

i. There is no significant relationship between IPPIS and transparency in government payroll administration Federal Civil Service?

2. LITERATURE REVIEW

2.1 Meaning of IPPIS

The Integrated Payroll and Personnel Information System (IPPIS) is information Communications Technology (ICT) based computerized Human Resource and accounting Management Information System project initiated by the Federal Government of Nigeria (FGN) to improve the effectiveness and efficiency of payroll administration for its Ministries, Departments and Agencies (IPPIS, OAGF, 2019). 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.

2.2 The Origin of the Integrated Personnel and Payroll Information System (IPPIS)

IPPIS is a product of the government initiated to turnaround the dwindling performance of the public and civil service. In 1999 after the Nigeria’s return to democratic rule, the Federal Government carried out a Public Service Reform (PSR) study and the result was the development of the National Strategy for Public Service Reform (NSPSR) in 2003 [2]. IPPIS was conceptualized in October 2006 by the Federal Government as one of its reform
programs, to improve the effectiveness and efficiency in the storage of personnel records and administration of monthly payroll in such a way to enhance confidence in staff emolument costs and budgeting. It was also envisaged that the System will be implemented according to best practices obtainable in other parts of the world where Information Communication Technology (ICT) is used to improve management reporting.

The Pilot Phase implementation financed by the World Bank commenced in February 2006 at the Bureau of Public Service Reforms (BPSR) upon the approval of the Federal Executive Council (FEC). While the project went live in April 2007 with seven (7) Pilot MDAs, its management was transferred to the Office of the Accountant General of the Federation (OAGF) in October 2008. The Pilot MDAs in which IPPIS was officially tested on are: Federal Ministry of Education; Federal Ministry of Transportation (Works arm); Federal Ministry of Finance; Budget Office of the Federation; Federal Ministry of Information; Ministry of Foreign Affairs; and National Planning Commission.

Prior to their registration, the nominal rolls of the Seven Pilot MDAs submitted indicated 55,000 staff, hence World Bank paid for fifty-five thousand (55,000) licenses. However, after their enrolment into the Scheme, it was discovered that their total staff strength was 32,000, therefore additional eleven (11) MDAs were brought on board in July 2009 to optimize the 55,000 licenses purchased. The MDAs are: Federal Ministry of Transport; Federal Ministry of Health; Federal Ministry of Agriculture and Water Resources; Federal Ministry of Aviation; Federal Ministry of Petroleum Resources; Federal Civil Service Commission; Federal Ministry of Works (Housing & Urban Development); Federal Ministry of Information (Communication); Office of the Accountant-General of the Federation; Office of the Head of Civil Service of the Federation; Office of the Secretary to the Government of the Federation.

Having seen the benefits of the Scheme especially in the area of savings to the Government, the Federal Executive Council in its meeting on Wednesday 1st December, 2010 approved the enrolment of all MDAs that draw their Personnel Cost from the Consolidated Revenue Fund (CRF) into the Integrated Payroll and Personnel Information System (IPPIS). The Phase II Service-wide implementation commenced under the platform of a new Software called Oracle Application in September 2011 in batches and is being financed by the Federal Government of Nigeria. As at April 2018, 490 MDAs (including the Nigeria Police and Other Paramilitary Agencies) have been enrolled into IPPIS with total staff strength of over 700,000 employees (IPPIS, OAGF, 2019).

2.3 Challenges of IPPIS Implementation

As noted by Mauldin & Ruchala [3], obvious challenges marred the effectiveness of IPPIS implementation till date. However, some of these challenges were either as a result of the nation under development in terms of technological infrastructure and expertise or simply the unwillingness of the authority to fully carry out the implementation. Some of the challenges enumerated by Ibrahim et al. [4] and Mauldin & Ruchala (2016) are: Lack of sufficient skills transfer to government personnel which prolong consultants stay on the project, poor state of supporting infrastructure such as low internet penetration, technological barrier, problem associated with transfer of pay point due to the posting of employees from IPPIS MDA to non-IPPI MDA, resistance from stake holders which have prolonged implementation, etc. In addition, this paper posits that government lack of will and commitment to the accelerated implementation of this project is a major challenge.

2.4 The Nigeria Civil Service

The Nigerian Civil Service has its origins in organizations established by the British in colonial times. Nigeria gained full independence in October 1960 under a constitution that provided for a parliamentary government and a substantial measure of self-government for the country's three regions. Since then, various panels have studied and made recommendations for reforming of the Civil Service, including the Margan Commission of 1963, the Adebo Commission of 1971 and the Udoji Commission of 1972-74. A major change occurred with the adoption in 1979 of a constitution modeled on that of the United States. The Dotun Philips Panel of 1985 attempted to reform to the Civil Service. The 1988 Civil Service Reorganization Decree promulgated by General Ibrahim Babangida had a major impact on the structure and efficiency of the Civil Service. The later report of the Ayida Panel made recommendations to reverse some of the past innovations and to return to the more efficient
Civil Service of earlier years. (Office of the Head of Service of the Federation, 2019) The Civil Service has been undergoing gradual and systematic reforms and restructuring since May 29, 1999 after decades of military rule. However, the civil service is still considered stagnant and inefficient, and the attempts made in the past by panels have had little effect (Daily Trust, 2009; [5]).

Adegbite [6], posits that Civil service is commonly used as the synonym of the Government machinery; this is so in Britain and most commonwealth countries of Sub-Saharan Africa. In British, civil service is used to refer to the body of permanent officials appointed to assist the decision makers. According to the 1999 constitution, section 318 (1) civil service refers to service of the federation (state) in a civil capacity, staff of the office of the President, (Governor), the Vice President, (Deputy Governor), a ministry or department of the federation (state), assigned with the responsibility for any business of the government of the federation (state), [7]. Therefore, civil service in Nigeria comprises workers in the various ministries or departments apart from those who hold political appointments.

2.5 IPPIS and E-Payment System

A simple basic definition of payment is exchange of monetary value for the receipt of goods or services. Tan (2004:3), defined e-payment as one in which monetary value is transferred electronically or digitally between two entities as compensation or consideration for the receipt of goods or services. The e-Payment system simply put is the electronic system of payment.

Despite the provisions of the Financial Regulations [8], Part 1, (1503) (i) which stipulates that all public servants shall have their salaries and allowances paid through named banks on completion of Treasury Form (4), which encourages e-payment transaction, it is obvious that such provision is handicapped to empower the organizations to carry out a centralized payroll system [2]. To address this challenge, Nigeria government through the CBN has issued policy directive on e-payment. The government has provided regulations and gone as far as providing the necessary infrastructure whenever it is lacking. Guidelines were issued to banks and other individuals to innovate and support electronic payment system [9]. Some of the Information and Computer Technological-based banking services available in the country include the personal computer banking, telephone banking, internet, electronic card (credit card), the Automated Teller Machine (ATM), among others. Adoption of IPPIS by the Federal Government further demonstrates the government resolves to promote e-payment in Nigeria.

2.6 Review of Empirical Studies

Ibanichuka et al. [10] examined the relationship between Integrated Personnel and Payroll Information System (IPPIS) and management of public sector funds. Primary data were used which were obtained with the aid of questionnaire administered to 100 respondents. The study employed the maximum likelihood estimation (MLE) techniques to analyse the data and the parameters were estimated using STATA computer package. The result from the analysis reveal that the implementation of IPPIS program has a significant effect on payroll fraud Recurrent Expenditure of the Government in the Nigeria civil service but IPPIS does not help the government in planning and Budgeting. The study recommends that Government ensure see that whenever an employee resign, or has been terminated, or demised they that their records are properly updated.

Ibanichuka and Sawyer [10] investigate empirically the relationship between Integrated Payroll System and government recurrent expenditure in Nigeria. Data were collected through primary and secondary sources. The secondary were collected from annual reports of Bayelsa State Government, Nigeria and survey data were obtained from 30 respondents using researcher-designed questionnaire validated by experts and shown to have a reliability coefficient of 0.90. Descriptive and ordinary least square regression statistical techniques were used in analyzing the data with the aid of Statistical package for Social Sciences (SPSS) version 21. The study findings revealed that there exists a positive and strong relationship between integrated payroll system and personnel cost and overhead cost. The study concludes that there exists a significant relationship between integrated payroll system and government recurrent expenditure, and recommends that all staff civil servants should be paid through bank and not by cash to prevent double hiring. Payroll presentation for all state civil servants should be centralized in the state treasury. Individual staff
5

records should be centrally and safely kept with relevant accounting packages.

Micah and Moses [11] examined if the introduction of integrated personnel payroll information system (IPPIS) could eradicate ghost worker from the payroll in Nigeria’s public service. The historical research method was adopted. Based on the findings, it was concluded that the implementation and deployment of Integrated personnel and payroll management system (IPPIS) have to a great extent reduced the incentive, capacity and opportunity of fraudulent individuals to perpetrate payroll fraud at all levels. However, there are some challenges: There are technological barriers. Most of the IPPIS staffs have not been exposed to oracle training. Major MDAs are yet to connect to the IPPIS platform over a virtual private network. Thus, it is recommended that MDAs at all levels should key into the IPPIS platform in line with the Federal Government Public sector reform agenda to minimize payroll fraud in Nigeria.

2.7 Theoretical Framework

Quite a number of theories of socioeconomic accounting were borrowed to form sound foundation to substantiate IPPIS adoption and implementation. Therefore this paper identified two theories, these are:

2.7.1 Stakeholder theory

Stakeholder theory's emphasizes the importance of the corporate responsiveness to stakeholder interests [12]. It assumed that adoption of IPPIS by the federal government is as a result of the pressure from stakeholders/citizens majorly against corruption [13]. It suggested that the government will responds to the concerns and expectations of powerful stakeholders/citizens and some of the responses will be in the form of strategic opinions. Stakeholders' theory provides rich insights into the factors that motivate government in relation to the adoption and implementation of Treasury Single Account [14].

2.7.2 Public finance management theory

This theory assumed that all aspects of financial resources mobilization and expenditure should be well managed in government for the benefits of the citizenry. It includes resources mobilization, prioritization of programmes, the budgetary process, efficient management of resources and exercising control to guide against threats. IPPIS was primarily adopted to guard against misapplication of public funds [2].

3. METHODOLOGY

3.1 Research Design

This paper used a descriptive cross-sectional survey research design, using questionnaire to illicit information from the respondents, which provides generalized opinions/statistics from the number of individual cases. The population of the study consist 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. The paper used a total 100 treasury staff as a sample using census. To validate instrument of data collection, copies of the questionnaire were distributed to experts who are knowledgeable in IPPIS and its application in the civil service. Reliability test was also carried out using Cronbach’s Alpha test to determine the inter-item consistency and reliability of the research instrument. (See appendix 1). Moreover, the data collected was analyzed using descriptive and inferential statistics with the aid of Statistical Package for the Social Sciences (SPSS) Version 21.

\[ Y = f(X) \]

Where

\[ Y \] represents the dependent variable Payroll Fraud Reduction (PFR) and
\[ X \] represents the independent variable IPPIS, and \( F \) represents Function, which means that \( Y \) is a function of \( X \) or \( Y \) is caused by \( X \). Therefore,

\[ Y = \beta_0 + \beta_1 + e \]  \hspace{1cm} (3.1)

Thus by substitution;

\[ PFR = \beta_0 + \beta_1 + IPPIS + e \]  \hspace{1cm} (3.2)

Where \( \beta_0 \) is the constant term,

\( PFR \) represents Payroll Fraud Reduction,
\( IPPIS \) represent Integrated Payroll and Personnel Information System,
\( \beta_1 \) is the coefficient of the independent variable (IPPIS) which measures the impact or the degree of influence of IPPIS on Payroll Fraud Reduction while
\( e \) is the error term.
4. SUMMARY OF FINDINGS

Hypothesis of this research was tested using simple regression and Pearson Product Moment Correlation to determine the impact and degree of association between the variables.

H₀: There is no significant relationship between IPPIS and transparency in government payroll administration Federal Civil Service in Nigeria.

Using the correlation techniques, this hypothesis was tested. The correlation results on Table 4.8 (see appendix III) indicates that there is a significant relationship between IPPIS and transparency in government payroll administration in Federal Civil Service. The value of Pearson Coefficient r =0.389 indicates a significant moderate positive relationship between the variables (0.00 <0.05).

Hence, the null hypothesis which states that there is no significant relationship between IPPIS and transparency in government payroll administration in Federal Civil Service in Nigeria is rejected and the alternate hypothesis is accepted.

In summary, the findings revealed that the relationships between IPPIS and Transparency was established from the descriptive analyses on Tables 4.4 (see appendix II), that majority of the respondents agreed that IPPIS brings about increase in transparency and accountability in Payroll administration in Nigeria. This finding was further supported by the correlation results on Table 4.8 (see appendix III), which shows significant moderate positive relationships between IPPIS, Transparency, and Accountability.

However, considering the fact that the variability explained by the model is low (the model only accounts for 14% variation in Payroll fraud), the large proportion of the unexplained variation (86%) should be a source of concern to the Nigerian Federal Government. That is to say, even though, the Nigerian government is so confident and had made several claims about elimination of fraud as a result of the implementation of IPPIS, this paper shows that IPPIS only makes a limited significant contribution to elimination of Payroll fraud. About 86% of other factors are required to achieve maximum reduction in Payroll fraud which are beyond the scope of IPPIS.

5. CONCLUDING REMARKS

Based on the aforementioned findings, the paper found empirical evidence to conclude that there is a significant moderate positive relationship between IPPIS and in increased in Transparency in Payroll administration in the Nigerian Civil Service. This paper further recommends that Government should strengthened the internal control mechanism of IPPIS so as to continuously detect and block any loopholes that will give room for fraud; that there should be regular Audit and Inspection of the program so as to ensure strict compliance with laid down rules and regulations governing the operation of IPPIS as well as compliance with the provisions of Financial Regulations and the Civil Service Rule; and welfare of Payroll personnel should be enhanced to reduce financial pressure that sometimes induces employees to commit fraud in the Nigerian Civil Service.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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APPENDICES

Appendix I

| Source: Author's Computation (2019) using IBM SPSS Statistics Version 23 |

<table>
<thead>
<tr>
<th>IPPIS Scale</th>
<th>Transparency Scale</th>
<th>Accountability Scale</th>
<th>Fraud Reduction Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>0.70</td>
<td>0.53</td>
<td>0.710</td>
</tr>
<tr>
<td>Valid Cases</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Excluded Cases</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Number of Items</td>
<td>7</td>
<td>5</td>
<td>6</td>
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Table 3.1: Reliability Test of the Research Instruments
Appendix II

Table 4.4: Respondents' Views on How Implementation of IPPIS Entrenched Accountability Among Treasury Staff

<table>
<thead>
<tr>
<th>ACCOUNTABILITY</th>
<th>SA</th>
<th>AG</th>
<th>U</th>
<th>D</th>
<th>SD</th>
<th>N</th>
<th>M</th>
<th>SDV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption of IPPIS makes finance officers more responsible in discharging their duties</td>
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<td></td>
<td></td>
<td></td>
<td>27</td>
<td>40</td>
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<tr>
<td>Adoption of IPPIS forces accountants to be more circumspect (careful) in their professional practices so that they will not be found wanting</td>
<td></td>
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<td></td>
<td></td>
<td>27</td>
<td>45</td>
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<tr>
<td>Adoption of IPPIS makes it easier for government to hold payroll officers accountable for Salary fraud.</td>
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<td></td>
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<td></td>
<td>45</td>
<td>46</td>
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<tr>
<td>Adoption of IPPIS makes treasury staff liable for improper record keeping of payroll record</td>
<td></td>
<td></td>
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<td>26</td>
<td>47</td>
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<tr>
<td>Adoption of IPPIS makes it mandatory for accounting officers to provide feedback to stakeholders their activities</td>
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<td>26</td>
<td>52</td>
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<tr>
<td>Overall, adoption of IPPIS has promoted and accountability in the payroll administration in Nigeria</td>
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Source: Author's Computation (2019) using IBM SPSS Statistics Version 23

Note: SA=Strongly Agree, A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree, %= Percent, M= Mean, SDV=Standard Deviation

Appendix III

Table 4.8: Correlations between IPPIS, Transparency and Accountability

<table>
<thead>
<tr>
<th></th>
<th>IPPIS SCORE</th>
<th>TRANSPARENCY SCORE</th>
<th>ACCOUNTABILITY SCORE</th>
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<td></td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
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**. Correlation is significant at the 0.01 level (2-tailed).

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