# Integrated Payroll and Personnel Information System (IPPIS) and Payroll Fraud in Rivers State Civil Service

### Nsiegbe Graham, Ph.D

Department of Political Science Rivers State University, Nkpolu-Oroworukwo Port Harcourt grahamnsiegbe@gmail.com

#### Ethel Innocent Amadi, Ph.D

Department of Political Science Rivers State University, Nkpolu-Oroworukwo Port Harcourt

#### Wali, Solomon Ajiegbu

Department of Political Science Rivers State University, Nkpolu-Oroworukwo Port Harcourt

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#### Abstract

This paper examined the impact of Integrated Payroll System and Personnel Information System (IPPIS) on payroll fraud in Rivers State Civil Service. The paper was anchored on the Fraud Triangle Theory (FTT) and Bureaucratic theory as its analytical framework. Survey research design was adopted for the paper. The population of the paper consisted of 3896 civil servants of the Rivers State Civil Service from 3 purposively selected ministries. While the sample size is 363 senior and junior workers of Rivers State Civil Service determined by the application of Taro Yamane's formula. Primary data for the study was collected through the use of likert scale structured questionnaire. The questionnaire items were designed on a four-point rating scale. A reliability index of 0.82 based on 0-1 scale was obtained for the instrument of the study. Frequencies, simple percentages and weighted mean scores were used to analyse the demographic data of the respondents and the question posed by the paper. While Pearson Product Moment Correlation (PPMC) was used to test the hypotheses at 5% level of significance. The findings of the paper showed that Integrated Payroll and Personnel Information System (IPPIS) has significant impact in reducing incidences of ghost workers in Rivers State Civil Service. Also, Integrated Payroll and Personnel Information System (IPPIS) plays a significant role in curbing

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payroll fraud in Rivers State Civil Service. The paper recommended among others that; Government should strengthen the internal control mechanism of IPPIS so as to continuously detect and block any loopholes that will give room for payroll fraud.

Keywords: Payroll, System, Information, Public Sector Corruption

#### Introduction

Corruption has been the bane of the world's economy. Corruption is a global menace that affects severely the economy of any nation and the societies. It has been subject of continuous discussions in literature as the cause of retardation to developing economies like Africa, Latin America, and Asia as seen today. Also, corruption is believed in most intellectual discourse to be one of the fundamental problems of the Nigerian economy that has negatively impacted its economic growth and development as a nation. This crime is common and rampant in public sectors and it is the bane of slow development to the Nigerian public sector and the economy as a whole. There is absolutely no aspect or sector of the economy that is not inflicted by this menace ranging from the financial institution to the health and education sectors as well as the public service (Dada & Jimoh, 2020). Globally, corruption has been a serious issue facing many governments, Nigeria inclusive. For most of these countries, billions of tax payer dollars are pumped out annually from the government treasury through salary payments to non-existing employees who have fraudulently been listed in the payroll system. Some of these employees may include retired civil servants, the deceased or fictitious names (Nangih & Diepiriye, 2017). Also in Nigeria, the exact number of Personnel in Departments and Agencies (MDAs) being paid by the 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 due to high level of corruption in the public sector (Kaoje, Nabila, Idris, Gambarawa & Ubandawaki, 2020). As a result, one of the most common frauds being perpetrated in the public sector in Nigeria is payroll fraud. According to the Independent Corrupt practices and Other Related Offences Commission Act (section 2), corruption includes vices like bribery, fraud and other related offences. Corruption also involves the theft of cash from government establishment through the preparations of the establishment's payroll. Some prominent examples of corrupt practices are: payroll fraud, pay cheque diversions, kickbacks, and ghost workers. Like other forms of crimes, corruption is a type of crime that is prevalent at all levels of government in Nigeria (Levira & Temple, 2018).

In an attempt to minimize corruption in public sector, the government in 2006 introduced the Integrated Payroll and Personnel Information System (IPPIS). The project (IPPIS) was implemented in 2007 and was formally commissioned in six ministries; Education, Foreign Affairs, Finance, Works, Information and Communications and the National Planning Commission. In 2009, the government expanded its scope to cover another nine MDAs which include Agriculture, Transport, Petroleum Resources, Aviation, Health, the Office of the Accountant General of the Federation, Office of the Head of the Civil Service of the Federation, Office of the Secretary to the Government of the Federation and the Federal Civil Service

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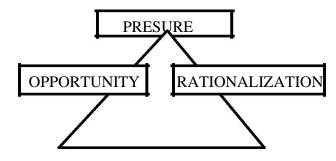
Commission in order to determine the relevance of the system and how efficient the system works. In the first month of implementation, the government saved N416 million through the process of IPPIS. Presently, the government is also pursuing the full implementation of the human management component of IPPIS and the full connectivity of all human resource and finance offices to the system. The reliability of the government payroll administration has drastically enhanced and amassed the number of MDAs drawing away from manual payroll system. The necessary information needed for planning personnel costs have been put in place by MDAs and key into the platform for better performance. With the introduction and implementation of IPPIS, the government has recorded a reduction in corruption as well as elimination of ghost worker syndrome in the public sector and this has leads to the reduction in the cost of governance (Sunday, Oro, Ogar, Imong, Jacob & Rim, 2017). Another component of IPPIS which minimizes public sector corruption and curbs ghost names is use of biometrics technology. According to Obara, Nangih and Agba (2017) biometrics technology employs one or more of an individual's physical characteristics as a means of identification. The Technology makes use of accurate measurement of, for example, an employee's eyes, hands, or voice; digitizes the measurement; saves the records in a computer's memory, and later compares it against the same measurement when taken later. Because it is difficult, if not impossible, to duplicate employee's physical measurement, biometrics is discovery applications in the provision of access to financial records, and other security-sensitive areas, such as access to medical records, buildings, payroll systems, attendance records, and banking services. To check payroll hands corrupt practices, biometrics have very wide application in the ministries and parastatal across the country. Tying each civil servant to his or her unique biometrics identifier is a step in the right direction for controlling corrupt practices such as eradicating ghost names and minimizing payroll fraud in the public sector (Obara, Nangih & Agba, 2017). Drawing from the foregoing, this paper seeks to examine the influence of Integrated Payroll System and Personnel Information System (IPPIS) on payroll fraud corruption in Rivers State Civil Service.

The specific objective of the paper is to examine the role of IPPIS in curbing payroll fraud in the Rivers State Civil Service. As such, the paper raised a single question derived from the specific objective: what is the role of IPPIS in curbing payroll fraud in the Rivers State civil service? Flowing directly from that; the paper was guided by the proposition that; the integrated payroll and personnel information system does not significantly curb payroll fraud in the Rivers State Civil Service.

The paper is segmented into five (5) interrelated parts. The first part is the introduction, which we just concluded. The second part covers the theoretical framework and brief review of relevant concepts to the paper. Third part is a synopsis of the method adopted to generate and analyze data for the paper. The fourth part encapsulates the presentation of data, analysis and discussion of the paper while the fifth part and of course the final part before the references, is the conclusion and recommendations of the paper.

#### **Theoretical Framework**

This paper was anchored on Fraud Triangle Theory. The Fraud Triangle Theory was propounded by Cressey in 1950. In 1950, Donald Cressey, a criminologist, started the study of fraud by arguing that there must be a reason behind everything people do. Questions such as why people commit fraud led him to focus his research on what drives people to violate trust? He interviewed 250 criminals in a period of 5 months whose behaviour met two criteria: (i) initially, people are accepting responsibilities of trust in good faith, and (ii) circumstances make them violate the trust. He related that three factors (pressure, opportunity, and rationalization) must be present for an offense to take place. Cressey further stated the following: "Trust violators conceive of themselves as having a financial problem that is non-shareable and have knowledge or awareness that this problem can be secretly resolved by a violation of the position of financial trust. Also they are able to apply to their own conduct in that situation verbalizations which enable them to adjust their conceptions of themselves as trusted persons with their conceptions of themselves as users of the entrusted funds or property" (Crassey 1953).



# *Source:* Cressey (1953) *Figure 1:* Fraud Triangle

The three elements of fraud summarized by Cressey (1953) are commonly presented in a diagram shown in Figure 2.1. The top element of the diagram represents the pressure or motive to commit the fraudulent act while the two elements at the bottom are perceived opportunity and rationalization (Wells 2011 in Rasha & Andrew, 2012). Since the aim of this study is to determine the effect of Integrated Payroll System and Personnel Information System (IPPIS) on public sector corruption in Rivers State Civil Service, this theory is related to this study as it emphasizes reasons why people practive corruption and commit fraud, motive of committing the fraudulent act as well as the importance of preventing such fraud. As such, one of the many ways corruption can be prevented is through Integrated Payroll System and Personnel Information System (IPPIS). Thus, the cases of corrupt practices in public sector appear to be on the increase and it seems difficult for anti-fraud agencies to successfully prosecute many of the alleged cases of corruption involving billions of naira. Thus, Integrated Payroll System and Personnel Information System (IPPIS) could be utilized to prevent public sector corruption by reversing the leakages that cause corporate failures.

# Method

Survey research design was adopted. The major purpose of survey research design is to provide information on characteristics of a population or phenomenon.

The population for this paper consisted of the entire employees of the Rivers State Civil Service comprising 26 ministries, 25 agencies and 4 commissions. However, 19 of these ministries are accessible with a population of 3896 civil servants, comprising 908 junior staff, 2421 senior staff and 567 management staff.

Simple random sampling was used in selecting the respondents. This is because simple random sampling gives every sample an equal chance of being selected among the sample to be used. Furthermore, the sample size was determined by using Taro Yamane's formula at a 0.05 level of significance i.e. 95% confidence level. The Taro Yamane's Formula is shown as:

$$n = \frac{N}{1 + N(e)^2}$$

Where,

n = Sample Size

N = Total Population

e = Tolerable error (0.05)

With the total of 3896 and 95% level of confidence (0.05 significance level), the sample size of this study is determined as follows:

n	=	3896			
		$1 + 3896 * (0.05)^2$			
n	=	3896			
		1 + 3896 * (0.0025)			
n	=3896				
		1 + 9.74			
n	=3896				
		10.74			
n	= 362	.7561			
n		<u>-</u> 363			
Thus, the sample size was 363.					

Primary data for the paper were collected through structured questionnaire. The questionnaire was specifically designed to accomplish the objectives of the paper. The questionnaire was divided into two segments with each segment addressing the variables of interest.

The descriptive statistics such as frequencies, simple percentages and means scores were used for the analysis of the demographic data and the only questions while the proposition was testing carried out through the use of Pearson Product Moment Correlation (PPMC).

### Data Presentation, Analysis and Discussion

**Question:** What is the role of Integrated Payroll and Personnel Information System (IPPIS) in curbing payroll fraud in Rivers State Civil Service?

Table 1: Mean Rating on the Role of Integrated Payroll and Personnel Information System
(IPPIS) in Curbing Payroll Fraud in Rivers State Civil Service

<b>S</b> /	Questionnaire Items	SA	Α	D	SD	$\overline{X}$	Remark	
Ν	-	(%)	(%)	(%)	(%)			
6.	IPPIS is adopted in the Civil Service	137	145	12	30	3.89	Accepted	
	to provide a reliable and	(39.1%	(41.4%	(3.4%)	(8.6%)			
	comprehensive database in order to	)	)					
	curb payroll fraud.							
7.	IPPIS reduces the risk of identity	161	157	16	16	4.01	Accepted	
	theft and fraudulently adding non-	(46.0%	(44.9%	(4.6%)	(4.6%)			
	existent employees to the payroll.	)	)					
8.	IPPIS facilitates manpower	189	119	17	25	4.33	Accepted	
	planning, eliminate record and	(54.0%	(34.0%	(4.9%)	(7.1%)			
	payroll fraud.	)	)					
0	IDDIC onhonoon the transmortan	171	126	12	21	4.02	Asserted	
9.	IPPIS enhances the transparency	171	136	13	31	4.23	Accepted	
	and traceability of financial	(48.9%	(38.9%	(3.7%)	(8.9%)			
10	transactions. IPPIS facilitates easy storage,	) 154	) 160	18	18	4.11		
10.	5 8,					4.11	Assented	
	update and retrieval of personnel	(44.0%	(45.7%	(5.1%)	(5.1%)		Accepted	
	records for administrative and	)	)					
	pension processes, leading to							
	payroll fraud reduction.							
	Source: Field Work, 2023.							

**Note:** SD = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree,  $\overline{X}$  = Weighted Mean

Table 1 showed the descriptive statistics of the responses of the respondents to the five items on the role of Integrated Payroll and Personnel Information System (IPPIS) in curbing payroll fraud in Rivers State Civil Service. The results in the table revealed that the respondents are in agreement with each of the five statements/items on the role of Integrated Payroll and Personnel Information System (IPPIS) in curbing payroll fraud in Rivers State Civil Service. This is because the total number and percentages of those who agreed greatly exceeded those that disagreed on each of these five statements/items. This is further confirmed by the weighted mean ratings of the five statements/items (3.89, 4.01, 4.33, 4.23 and 4.11) which are above the criterion mean of 2.5 each. Based on these results, there is sufficient statistical evidence to conclude that Integrated Payroll

and Personnel Information System (IPPIS) plays a vital role in curbing payroll fraud in Rivers State Civil Service.

# **Test of Proposition**

The proposition formulated was tested at 5% level of significance using Pearson Product Moment Correlation (PPMC) through the help of Statistical Package for Social Sciences (SPSS) 21.0 version. The decision rule for accepting or rejecting any of the hypotheses is stated below: **Decision Rule:** Reject the null hypotheses at 5% level of significance if the *p*-value is less than *alpha value* of 0.05. Contrarily, retain the null hypotheses at 5% level of significance if the *p*-value

is greater than *alpha value* of 0.05.

Table 2: Pearson's Product Moment Correlation (PPMC) on IPPIS and Curbing of
Payroll Fraudin Rivers State Civil Service

		IPPIS	Curbing of
			<b>Payroll Fraud</b>
	Pearson Correlation	1.000	.622**
IPPIS	Sig. (2-tailed)		.008
	Ν	350	350
Curbing of Douroll	Pearson Correlation	$.622^{**}$	1.000
Curbing of Payroll Fraud	Sig. (2-tailed)	.008	
Frauu	Ν	350	350

\*\*. Correlation is significant at the 0.05 level (2-tailed).

# Source: Field Work, 2023 (SPSS 21.0 Output).

Table 2 above reveals a Pearson Product Moment Correlation (PPMC) coefficient of 0.622 and probability value of 0.008. This result indicates that Integrated Payroll and Personnel Information System (IPPIS) positively curbs payroll fraud in Rivers State Civil Service.

**Decision on the Proposition:** Since the *p*-value (0.008) is less than alpha value (0.05), we therefore reject the null hypothesis two ( $H_{02}$ ) and conclude that Integrated Payroll and Personnel Information System (IPPIS) significantly curbs payroll fraud in Rivers State Civil Service.

#### **Discussion of Findings**

The findings emanating from this paper indicated that; the Integrated Personnel and Payroll Information System (IPPIS) helps in addressing ghost worker in the public sector in Nigeria. Also, the findings emanating from this study indicated that Integrated Payroll and Personnel Information System (IPPIS) plays positive role in curbing payroll fraud in Rivers State Civil Service. This shows that increase in the use of Integrated Payroll and Personnel Information System (IPPIS) will lead to reduction in payroll fraud in Rivers State Civil Service. Also, the result of the proposition tested showed that Integrated Payroll and Personnel Information System (IPPIS) significantly curb payroll fraud in Rivers State Civil Service. This result is supported by Ibanichuka and Sawyer

(2019) who found that Integrated Personnel and Payroll Information System (IPPIS) improves management of public sector funds through reduction in payroll fraud. This finding is also related to the finding of Wale and Taye (2021) who established that integrated personnel and payroll information system plays a significant role in promoting efficiency in government recurrent expenditure in Nigeria.

# **Conclusion/Recommendations**

The paper determined the influence of Integrated Payroll System and Personnel Information System (IPPIS) on payroll fraud in Rivers State Civil Service. The paper found that Integrated Payroll and Personnel Information System (IPPIS) plays a significant role in curbing payroll fraud in Rivers State Civil Service as well as in promoting accountability in Rivers State Civil Service. Based on the finding, the conclusion drawn in this study that integrated payroll system plays a significant role in reducing public sector corruption in the overall Rivers State Civil Service.

Based on the findings and conclusions generated from the study, the following recommendations are made:

There should be Implementation a policy mandating the use of biometric verification for all government employees enrolled in the IPPIS in order to reduce incidence of ghost workers in Rivers State Civil Service. This should include capturing fingerprints and facial recognition data to ensure a unique and verifiable identity for each employee.

There should be enforcement of a policy that mandates the automated validation of employee data, including qualifications, certifications, and employment history, during the on boarding process onto IPPIS so as to curb payroll fraud in Rivers State Civil Service.

There should be regularaudit and inspection of the IPPIS 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.

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