Electronic Governance and Corruption in Nigeria: Combing Insights from Integrated Payroll and Personnel Information System (IPPIS) Implementation

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Abstract

The paper explores the extent to which IPPIS as an e-governance tool reduces corruption in the Nigerian public service. This investigation was motivated basically because IPPIS was introduced to guard against fraudulent practices and entrench accountability as well as transparency in the Nigerian Public Service. However, there are mixed reactions regarding its effectiveness in the Nigerian public service. Utilizing the qualitative method, this paper infers from analysis of existing bibliographic documentation that the use of IPPIS based on the evidence cited across Africa and Nigeria in particular is instrumental in deterring and detecting fraud. Hence, the paper supports the application of IPPIS in all MDAs. The paper, however, strongly concludes that the extension to MDAs at various levels of government can easily be facilitated and made more effective when proper records of employees are fed into the IPPIS and the operators are constantly trained and motivated to encourage them to be upright while discharging their duties. Furthermore, a comprehensive payroll and personnel system modules should be built into the IPPIS to enhance its effectiveness. Consequent upon the foregoing, the paper recommends inter alia that there is a need for government to extend its implementation to all Ministries, Departments and Agencies (MDAs) at Federal, State and Local Government levels.

Keywords: IPPIS, Corruption, E-governance, Payroll fraud, Ghost workers

Introduction

The prevalence of corruption in any society invariably means backwardness underdevelopment. The level of corruption in country, determines the level development, and it affects societies in multiple ways, in worst cases; it costs lives (Transparency International, 2017). Nigeria as a country has been battling with the issue of corruption for a very long time (Hope cited in Nwaodu, Adam & Okereke, 2014). This corruption permeates the political, economic, social, and virtually every sector of the economy (Smith, 2007). According to Ogbewere (2015), corruption is a clog in the wheel of progress in Nigeria and has incessantly frustrated the realisation of noble

national goals. This has led successive governments to enact laws, set up structures all in a bid to curtail this ugly menace. Unfortunately, many concluded that these efforts have not been successful (Nwaodu, Adam, & Okereke, 2014; Adeniran, 2019). The efforts have not triumphed in the vanguard against corruption because they appear to be too traditional. Hence, the quest digital measures through towards application of Information and Communication Technology (ICT).

The emergence and rise in the use of ICT ensures not only a rapid and improved communication, proficient storage, retrieval and processing of data, exchange, utilisation of information to its users, irrespective of

their endeavours. organisations or governments, but also serve as prerequisites for transparency which is a key tool in the fight against corruption (Owusu-Ansah, 2013). According to Silveira cited in Folorunsho (2017), technology was able to achieve this by increasing automation. ensuring accuracy which was able to detect and deter fraud and collusion. Governance all over the world is tilting towards electronic governance due to the inherent benefits embedded in it (Kettani & Moulin, 2014). Consequently, the Nigeria government also joined the digitalised country of the world by introducing policies that will boost the use of Information and Communication Technology (ICT) in the governance of the country. One of such initiatives was the introduction of the Integrated Payroll and Personnel Information System in the Nigerian public service in 2007 to ensure transparency and accountability in human resource management and public financial development management. This prompted by some critical issues associated with the payroll system in the Federal Public Service of Nigeria. It was revealed that: The payroll of MDAs funded from the

Consolidated Revenue Fund (CRF) was based on budget figures and not on the actual number of personnel on their nominal rolls. Payroll systems were decentralized, making the monitoring of personnel emoluments against the Federal Government's budget and achievement of effective planning personnel matters difficult. These paved ways for the proliferation of "ghost workers" or non-existent staff and other forms of payroll abuses to justify the deliberate huge personnel budget allocation. Moreover, the manual computation of personnel information and salary administration in the Nigerian Federal Civil Service resulted to the inaccurate computation of salary leading to overpayment, 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 and other various forms of payroll and credential fraud (Folorunsho, 2017:2).

Consequently, this paper examines the extent to which IPPIS mitigates against corrupt hazards featuring in the old system or the manual method of computing salaries in the Nigerian public service. To achieve this objective, the paper is organised into sections. The first section reviews the relevant concepts. The second section dwells on the methodology used to carry out the research. The third section deals with empirical cases of corruption reduction using IPPIS or its equivalent across the globe. Similarly, section four explores application of IPPIS in reducing corruption in Nigeria.

Statement of the Problem

The pre-reform issues associated with the personnel and payroll system in the Federal Public Service revealed that payroll of MDAs funded from the Consolidated Revenue Fund (CRF) was based on budget figures and not on the actual number of personnel on their nominal rolls (Office of The Secretary to the Government of the Federation [OSGF],2014; Ibanichuka & Sawyer, 2009). Pavroll systems were decentralized, making the monitoring of personnel emoluments against the Federal Government's budget and achievement of effective planning on personnel matters difficult. These paved way for the proliferation of "ghost workers" or non-existent staff and other forms of payroll abuses to justify the deliberate huge personnel budget allocation. Moreover, the computation of personnel manual information and salary administration in the Nigerian Federal Public Service resulted to the inaccurate computation of salary leading to overpayment, underpayment, and

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 and other various forms of payroll and credential frauds (Agboola, 2018). One of the major reasons for the introduction of IPPIS in the Public Service was to curtail fraudulent practices as identified above. Therefore, this paper focus on examining the extent to which IPPIS, an e-governance tool, reduces corruption in the Nigerian public service.

Methodology

The study applied qualitative research due to its usefulness in providing insights, uncovering trends in opinions and its usefulness in delving deeper into a phenomenon. Data for this research were collected mainly from secondary sources. The secondary data were sourced from articles, publications of previously acknowledged works of others such as journals, textbooks, media and the internet.

Conceptual Review:

Corruption

The concept of corruption has no generally accepted definition. Scholars have defined the concept based on their perception of what the term connotes. Scholars like Ejikeme (2006) and Anaedozie (2017) see it as the abuse of powers confined on a constituted authority for personal enrichment. Ukaid (2017) and Anaedozie (2017) perceive corruption as an abnormal practice in any political set up, while Rose-Ackerman (2004); Barcham, Hindess and Larmour (2012) view corruption as a disease that is capable of endangering a society.

According to Transparency International [TI] (2017), corruption is the abuse of entrusted power for private gain. Similarly, Ekiyor cited in Iyanda (2012), perceives corruption as the unlawful use of official power or influence by an official of the government

either to enrich himself or further his course and/or any other person at the expense of the public. Without mincing words, Scott (1972) attests that the phenomenon of corruption is a regular, repetitive and integral part of the operation of most political systems. This view as far back as 1972 is still very active in the discourse on corruption because the situations hitherto has not significantly changed from this scholarly observation. Corroborating the foregoing, Ngwakwe (2009) defines corruption as the nonviolent criminal and illicit activity committed with the objectives of earning wealth illegally either individually or in a group or organised manner thereby violating existing legislation governing the economic activities government and its administration. Doig cited in Iyanda (2012) sees corruption as any use of official position, resources or facilities for personal benefits or possible conflict of interest between public position and private benefit. Relating corruption to an ailment, Alanamu (2009) asserts that corruption is like a disease that can cause total pathology for an organisation and with regards to society, corruption can affect the economic, social, political and the moral aspect of the society. Reducing it to a criminal-like activity, Nyere (1999) observed that corruption is an enemy of progress and development which could be treated as a serious crime equivalent to treason. Corruption takes place if public officials use power illegitimately to benefit a private interest to the detriment of societal progress and development (Nas, Albert and Weber 1986, Morris, 1991). Discussing the consequences of corruption, Uzochukwu (2017) attested that it leads to poor investment, a rise in poverty, poor national development and national crises.

In a similar vein, Appo (2015) detailed the consequences of corruption to include unemployment, insecurity, poverty, kidnapping, inability to pay salaries,

infrastructural decadence, bigotry and above all deaths. The above costs, according to TI (2015), hit hardest at the poor who make up more than 40 percent of the total population. There is no doubt that in the past decades, large sums of money left Nigeria illicitly. These huge sums could have been used in building necessary infrastructures, serve as an investment into key areas of the economy that could have boosted the growth and of development the economy. conclusions from the scholarly opinions provided above suggest that corruption is a deadly phenomenon that needs to be urgently treated to curtail its harms.

Electronic governance

E-Governance or 'electronic governance' is the use of Information and Communications Technology in the discharge of government responsibilities so as to ensure 'Simple, Moral. Accountable, Responsive Transparent' (SMART) governance (United Nations [UN], 2005). The application of ICT to disseminate information to the citizens, businesses and among sections, units or departments of government, faster and better delivery of public services, improving internal efficiency, cost reduction, boosting reorganising income, administrative processes for improved quality of services (UN, 2005). Similarly, e-governance is the process of enhancing governance system through the application of ICT within and without the various levels of government (Okot-Uma, 2000).

In a similar vein, Backus (2001), views e-governance as the use of electronic means in the network of relationship between government and the public, government and businesses, as well as in operations within governmental systems to simplify and improve democracy, government and business aspects of governance. Gil-Garcia and Luna-Reyes (2006) aligned their perception of e-governance to the foregoing,

when they assert that enhancing managerial effectiveness, promoting democratic values and mechanisms, a regulatory framework aimed at initiating intensive information and the advancement of knowledge society via the use of ICT is e-governance. Closely related to the above, E-governance is the performance of governance using the electronic gadgets to disseminate information that are characterised with speed, efficiency and transparency to the citizens and agencies of government for performing government administrative activities (United Nations Scientific Educational, and Cultural Organization [UNESCO], 2005).

Deducing from the above, electronic governance is the use of electronic media in governance to facilitate data storage, accessibility, transparency and interaction between and among levels, organs of governments and the public which include business organisations and the citizens. All the definitions cited above corroborate the fact that E-governance entails the use of electronic media in governance to facilitate the interface between and among segments within and without the government. Kariuki and Kiragu (2011), identify the different interactions that exist in e-governance to include systems and services between government to citizens (G2C), Government Business (G2B), Government Government (G2G) and Government to Employees (G2E). Out of the listed levels of interactions, IPPIS can be categorised under Government to Employees (G2E), which denotes a regular interface between the government and its employees. interaction is not a one way traffic mode between the government and the employees. It is a dual mode relationship to help employees maintain communication with the government and their own colleagues using online tools, sources and articles. With this arrangement, documents can now be stored

and shared with other colleagues online. Paperlessness of the office and the ease with which to send documents back and forth with colleagues across the globe as substitute to printouts are other accrued advantages. In addition, personnel records of employees are maintained with the aid of a software via the interface of G2E. The software helps keep all personnel information in one location and also promotes regular update of personnel information such as social security numbers, tax information, current address and other information

(https://en.wikipedia.org/wiki/E-governance).

IPPIS as an example of G2E, deals typically with personnel and payroll related issues. It keeps vital information such as names, addresses. employment information employees, and also a good interactive framework for calculating and printing payroll checks, as its operational focus, is majorly on electronic personnel records and electronic payment (Chima, Ahmadu and Folorunsho 2019). HR/payroll database integration automates many of the functions of payroll, saving time and ensuring correct accounting and prompt payment of salaries. From the above, it can be deduced that IPPIS is an aspect of electronic governance.

Integrated Personnel and Payroll Information System

IPPIS serves as software that stores information regarding government employees, which are kept electronically and it is to ensure accurate and timely payment of salaries. Under IPPIS, personnel records such as name, date of birth, date of appointment, years of service, salary account, promotion and other information are kept and it encourages and facilitates electronic transfer and payment of salaries and entitlement to workers which is also known as E-payment (Office of The Accountant-General of the

Federation (n:d)). E-payment which means electronic payment is a system where the settlements of transactions are made to the payee through the payee's bank account without involving the issuance of cheques or cash. It is known with different nomenclature from country to country. In Kenya and Ghana, it is called Integrated Personnel Payroll Database. While, in Uganda, Rwanda and Tanzania, it is called Integrated Payroll and Personnel System (IPPS) and known as Biometric Identification Employee Records System (EBIRS) in Liberia (Folorunsho, 2017).

According to Kenya Department of Public Management [KDPM] (2015), the IPPS programme initiative catalyzes electronic human resource (e-HR) programme efforts by making accessible staff information to employees at their desktops. IPPIS is an integrated personnel record, pay capabilities and a comprehensive human resource record for all personnel in an organisation (Integrated Personnel Management System Report, 2008). For Nelson (2017), IPPIS involves a payroll system and a personnel system. A payroll system focuses on the salary or wages of the employees at one point in time, not in continuum like the personnel system. It calculates employees' net pay and taxes for a specific period of time and makes deductions for payroll activities like donations to charities and healthcare.

Personnel systems, unlike payroll deals with personnel matters in a continuum. It focuses on personnel matters from recruitment to retirement. It keeps records of annual performance evaluation, variation in salary, manpower performance planning, management, leave management, comparative analysis of pay rate of employees on similar grade level, and whether they are taking advantage of organisation savings and retirement programmes. The comprehensive technical

effort identify and integrate all relevant information such as a full range of manpower, personnel capabilities, training development and delivery, human factors engineering, system safety, health hazards, into the system. Therefore, IPPIS can be seen as an electronic platform where records of government employees can be stored for easy access and utilisation (Folorunsho, 2017). Several reasons informed the introduction of IPPIS to guide the administration of salary in the Nigerian public service. One of the reasons, according to OAGF cited in Osisioma (2015) is the facilitation of planning. In this regard, having civil service records in a centralised database will aid manpower planning as well as assist in providing information for decision making. Also, it aids budgeting because; an accurate recurrent expenditure on emolument could be planned and budgeted for Furthermore, IPPIS was instituted to ensure that personnel information comprehensive and accurate (database integrity). Data based integrity features are inbuilt in the ICT based system to avoid unauthorized users to manipulate data once computed to prevent alteration of sensitive employees' information such as dates of appointment and birth. Other objectives of IPPIS are: monitoring the monthly payment

of staff emolument, elimination of payroll fraud, such as non existing staff and several payments of emolument to a single worker. simplifies storage, maintains currency and retrieval of personnel information for administrative and pension processes as well as provision of a good working environment that is conducive and supportive to the operation of modern, proactive public service that is innovative and technologically driven. **Corruption: IPPIS** and A **Nexus** Corruption as earlier defined is the misuse of bestowed power for personal gain. It props up in two dimensions. These are the financial and non financial dimensions. The financial dimension takes forms like bribery, extortion and fraud. The non financial dimension is also called the administrative bureapathological corruption. It can take an administrative form such as favouritism, nepotism, tribalism, opportunism, sexual harassment, influence peddling, etc. IPPIS is targeted at eliminating a financial form of corruption such as ghost workers, multiple salaries, overpayment of salaries and undue entitlements. There are shreds of evidence across other African countries that shows that the implementation of IPPIS is effective in detecting and deterring financial fraud. These pieces of evidence are illustrated in the table

Table1: Evidence of Corruption Reduction Using IPPIS From Selected African Countries

below.

Country	Year	Ghost workers reduction	Payroll fraud Reduction	Source
Tanzania	IPPIS 2000	43000 ghost workers as of July 2011	Exposed 127 attempts in one month	Stevens and Teggemman (2004)
Liberia	Employee Biometric Identification and Record System (EBIRS)	Several hundred of ghost workers detected in the first phase	Save millions of dollars in bogus pay. Reduced payroll from 10- 15 percent	Friedman (2011) Muhala (2011)
Guinea Bissau	Biometric Census	4000 ghost workers by 2009		(International Monetry Fund [IMF] 2011)

Source: Authors' construct, 2018

From the Table 1above, IPPIS since its introduction in Tanzania has been able to remove 43,000 ghost workers and it exposed 127 fraud attempts just within one month of its inception. According to Stevens and Teggemman (2004), the integrated personnel and payroll system proved to be extremely effective at preventing fraud, fighting corruption and reducing the public wage bill in Tanzania.

In Liberia. **Employee Biometric** Identification & Records System (EBIRS) which is similar to IPPIS implemented in Nigeria was introduced. Incidentally, it reduced payroll by 10-15 percent, detect several hundred of ghost workers in its first phase of its introduction. The EBIRS project. which began with core ministries, has been gradually rolled out to other public sector workers over time. The Liberian government has reportedly considered expanding the system into a national ID project that will cover all citizens as a result of its effectiveness. For Guinea Bissau, a biometric census of civil servants in 2009 as reported cut 4,000 workers from the public wage bill (IMF Report, 2011). Also in Rwanda, the Integrated Personnel and Payroll System (IPPIS) was introduced in 2010 to support the implementation of the civil service reforms. Rwanda's performance significantly improved in all six dimensions of the Worldwide Governance Indicators (WGI) between 1996 and 2012. It rose from the 20th percentile rank on control of corruption in 1996 to the 27th percentile in 2005 and the 73rd percentile in 2012. Government effectiveness rose from 11th percentile in 1996 to the 53rd percentile in 2012. The performance of Rwanda can be attributed to the aggressive reforms embarked by the government and the adoption of IPPIS. The introduction of IPPIS has been largely

successful in Rwanda (International Development Association [IDA] 2017).

However, IPPIS equivalent in some other African countries such as Kenya, Uganda and Ghana seems not to have lived up to expectations. In Kenya, although there are no figures released on the number of ghost workers removed from her payroll and the effect of the policy on payroll fraud. However, concerns were raised about the continued existence of "ghost workers" in government payrolls and a ballooned wage bill despite the implementation of Integrated Personnel Payroll Data (IPPD). These called for more focus than before on the operations of the IPPD to address the concerns listed above. It was discovered that IPPD lacks key modules, although the Government Human Resource Information System (GHRIS) is include performance planned to management management. leave improved establishment module (Kinyeki, 2015). Moreover, although the system has been in operation for over ten years, yet has some shortcomings. The IPPD system could not provide information on professional qualifications, shows stations where officers are working and their specialization among many other data elements which led to the government carrying out the biometric exercise which was rolled out to collect additional data (DPM Reports, cited in Folorunsho, 2017).

In Uganda, despite the implementation of IPPS, the audit exercise by the government showed that approximately 7,600 ghost workers were found in the Ugandan public service in 2012. These fictitious figures were deliberately included in the payroll, thereby skyrocketing the cost of governance in billions of shillings. The audit uncovered that the scheme was made possible by a collusive agreement between officials within the Ministry of Public Service, supported by

the Ministry of Finance (AllAfrica, 2012). Moreover, IPPS was reviewed in 2015, and results showed that data inputted in IPPD were deficient, and a serious discrepancy between the actual payroll data and the IFMIS system. Personnel staff were unaware of the authentic payments made and as well in doubt as to whether the actual payment made tally with the figures computed in the IPPD Payroll (Uganda IPPS Report cited in Kinyeki, 2015).

In Ghana, the first Integrated Personnel Payroll Database (IPPD) was introduced in 1993, the first IPPD was adjudged ineffective as Information inputted into the IPPD were gotten from personnel files, but the information derived from these files were considered lacking elements of completeness or erroneous because non-pensionable posts were not covered. Pension information was derived largely from the Controller and Accountant General Department (CAGD) pensions system (Stevens & Teggerman, 2004). In addition, personnels' identity was difficult to know as the system cannot accept full names to be entered. Moreso, status of employees were in most cases shown inactive, but without a corresponding effective date. Any dates could be entered and accepted erroneously or in default as date of birth. Further, the system was not usersfriendly; consequently, inaccurate results were always churned out. Due to the foregoing abnormalities, the system was always shut down fortnightly each month, and incidentally, the emergence of IPPD2. The IPPD2 would have recorded success stories compared with IPPD1, but for the inaccurate data migrated from IPPD1. Invariably, what the foregoing suggests is that problems rather than progress were

transferred to IPPD2. The inherited challenges from IPPD1 coupled with lack of network infrastructure, hardware, workstations due to inadequate funding truncated the expected progress in IPPD2. (International Record Management Trust [IRMT], 2008).

Despite the pitfalls recorded with IPPD2, Stevens & Teggermman (2004) asserts that the project terminates cash payment, and also generated staff ID that eventually became a good payroll control instrument. Notwithstanding, staff strength were still difficult to determine accurately due to unreliability and incompleteness of data inputted into IPPD. Apart from observance aforementioned. of administrative procedures for updating the payroll were neglected. This prompted the predominant incidences of irregularities and fraud in Auditor General's reports. Records of personnels at the ministries lacked qualities, completeness and were in most cases not accessible. These shortcomings were possible because, events in the civil servants' career structure were not properly documented by the employing authorities. A 'Public Sector Employee Census' conducted in 2003 reported that there was no single location where data was available for all employees paid by the Government of Ghana's Consolidated Fund, nor was adequate information available in the ministries (Stevens & Teggermman, 2004). With particular reference to Nigeria just like other African countries presented above, the introduction of IPPIS as a reform measure in the public financial management system in Nigeria has achieved a lot. The table 2 below presents the details of this assertion.

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Table2: Evidence of Corruption Reduction Using IPPIS in Nigeria

System	Period	Effect on Ghost Workers	Effect on payroll	Source
name				
IPPIS	2010	43, 000	ghost	workers
		removed		
		17000 workers removed		Okafor (2012)
		from PHCN		
	2014	The number of ghost		Bola (2016)
		workers removed rose to		, ,
	2016	65,000	N185billion saved	Adekunle (2016)
			since inception	

Source: Authors' construct, 2018.

From the table 2 above, IPPIS as outlined by Gabriel (2011) saved N12 billion in the first phase alone as a result of eliminating payroll fraud. Also, it reduced the government monthly payroll by N2.2 billion. From this, it is evident that when there is a reduction in fraud, there will be a corresponding reduction in the amount budgeted for payment in salaries. Moreover, IPPIS led to the removal of forty-three thousand (43,000) ghost workers from various MDAs at an annual cost of over N12 billion (Kadiri, 2018). However, it was not clear how long the ghost workers had been on the payroll and who had been collecting salaries and fringe benefits on behalf of the ghost workers.

Also, Okafor (2012), asserted that seventeen thousand (17,000) fraudulent workers were eliminated from the Power Holding Company of Nigeria (PHCN) payroll alone. Moreover, Bola & Kauther (2016) reported that as of 2014, the ghost names removed, had risen to sixty thousand (60, 000) while Adekunle (2016), revealed that towards the end of 2016, over sixty-five thousand (65,000) ghost workers have been removed and N185 billion was saved by the government since its inception. Despite the success story of IPPIS, Bola (2016), reported that a civil servant was detected to be collecting 20 salaries from different places. This, according to Bola et al was detected

courtesy of the application of Bank Verification Number (BVN) along with IPPIS in certain MDAs where IPPIS was introduced.

The above shows that if BVN was not introduced, the particular civil servant may not have been detected despite the existence of IPPIS. Notwithstanding the shortcomings noticed in Nigeria and other countries cited above, the policy has proven its usefulness in exposing and deterring certain financial crimes committed in the Public Service, which can ardently be reported to have contributed to reducing corruption in Nigeria and in other countries where the initiative is being implemented.

Despite the enormous achievements by IPPIS in tackling corruption, it is still clouded with the following challenges. Some of the challenges, according to Osisioma (2015) include incompetent on the part of the IPPIS staff, which reflects in the computation of inaccurate data by officers when filling IPPIS forms. Dates of appointment and birth are in most cases erroneously deposited in the database. Another critical challenge borders on interconnectivity problems with some MDAs. The consequence of this is late payment of salaries in the public service. Others include arbitrary posting and the inadequate training of IPPIS staff to discharge responsibility their effectively.

Enakirerhi & Temile (2017) corroborated the findings by Osisioma when they asserted that skills transfer problem, poor supporting infrastructure, technological barriers to inter MDAs transfer, resistance from stakeholders and lack of will for accelerated implementation threatened effective implementation of IPPIS.

Conclusion and recommendations

The use of ICT in governance is generally seen as a necessary tool to ensure transparency in the process, accountability for activities and a faster means of the decision-making process. Government all of have accepted world electronic governance as a new way of leadership, restructuring the administrative process, improving internal efficiency, reducing cost and a new way of delivering information and service. Against this backdrop, governments Sub-Sahara Africa have accorded importance to enhancing their information system through electronic governance and Nigeria is not left out of this innovation.

The realization that the manual methods of keeping and maintaining records by the Nigeria Public Service is unreliable for human resource planning and are easily to manipulation led to the implementation of IPPIS. **IPPIS** introduced to maintain electronic personnel and pay records of government employees and to ensure that these records are kept in one location and are continuously updated to reflect the current status of every personnel. It is to ensure a clean personnel and payroll database devoid of fraud which is germane for effective manpower planning, budgeting and corruption reduction. On a general note, the performance of IPPIS in these areas has been encouraging and worth replicating in every MDAs at both state and local levels of government. Consequently, IPPIS should be implemented in every Public Service at the Federal, state and local levels. The use of BVN along with IPPIS should be mandatorily encouraged. Also, the use of multiple biometric recognition should be introduced to effectively curb the issue of ghost workers. Finally, the IPPIS human resource modules should reflect key payroll and personnel system modules necessary to curb corruption and there should be a proper check on the records and files of government workers so that information transferred from the files to the IPPIS system is accurate and dependable.

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