



SOFTWARE SOLUTIONS AND FINANCIAL MANAGEMENT PERFORMANCE: A STUDY OF FEDERAL INLAND REVENUE SERVICE OFFICES, LAGOS STATE, NIGERIA

Dr. Ogunleye, Omowunmi Jumoke¹, Dr. Damilola, Fagboro², Mbazulike, Juliet Uche^{3*}

¹Department of Accounting, University of Lagos, Akoka, Nigeria,

²Department of Accounting, University of Lagos, Akoka, Nigeria

³Business Education Department Federal College of Education Katsina, Katsina State, Nigeria

*Corresponding Author

Article DOI: <https://doi.org/10.36713/epra20062>

DOI No: 10.36713/epra20062

ABSTRACT

The study investigates the role software solutions play in enhancing the efficiency in the financial management of the public sector with particular reference to the Federal Inland Revenue Service offices in Lagos state, Nigeria. This is in light of the perceived inefficiency of public sector ministries, departments and agencies. To this end, the specific objectives of the research focused on ascertaining the influence of Government Integrated Financial Management Information System, TaxPro Max, Systems Applications and Products on financial management performance. To achieve this, the study adopted a survey approach. Data was collected from sixteen Federal Inland Revenue Service offices in Lagos state and analyzed using descriptive statistics and linear regression. The findings reveal that software solutions have a statistical significant impact on financial management performance, indicating that software solution is a vital tool for enhancing financial management practices in Federal Inland Revenue Service offices, Lagos state. The study therefore, calls for implementation of advanced software solutions, to enhance financial management performance.

KEYWORDS: Software Solutions, Financial Management, Performance, Federal Inland Revenue Service.

INTRODUCTION

In the digital age, the integration of information technology in public sector financial management has become imperative for enhancing efficiency, accuracy and transparency. Software solutions serve as critical tool in this transformation, enabling organisations to streamline their financial operations and improve overall financial performance (Mia and Clarke, 1999). Specifically, the Federal Inland Revenue Service (FIRS) in Nigeria, responsible for tax collection faces unique challenges that necessitate the adoption of accounting solutions to optimize its financial performance. Similarly, Nigerian public sector generally, is not exempted from the challenges. There have been cases of financial mismanagement in the public sector, an indication of flaw in performance and control. In line with the foregoing, Shehu (2020) observed that the failure of Nigerian authorities to achieve transparency and financial accountability in the public sector is typically linked to prevailing weaknesses in expenditure control, public accounting, auditing, fund management and the administration of financial records.

Government in a bid to address the challenges embarks on diverse restructure. This is evident in several reforms undertaken by past governments and still ongoing by the present government which have not yielded the desired results. In affirmation, Onukelobi

and Okoye (2019) established that even though authorities have, over the years, delivered countless reforms in the public sector, the performance of the sector has nonetheless been questionable. These reforms together with globalization make it imperative for the introduction of software solutions for better performance and results. The role of software solutions in enhancing financial management performance is well-documented. Granlund and Malmi (2002) observed that accounting software can facilitate accurate financial reporting, improve data integrity, and enhance decision-making processes. In the context of tax administration, effective accounting systems can lead to better revenue forecasting, efficient resource allocation and improved compliance rates, all of which are vital for the FIRS's objectives (Osei-Assibey & Chansarkar, 2019).

Therefore, the introduction of Government Integrated Financial Management Information System (GIFMIS), TaxPro Max, Systems Applications and Products (SAP) packages in the FIRS is a reform in the right direction. The use of software solutions has been proven to be the best system for managing the financing department in many organisations. It is also believed to meet industrial and professional principles and government standards since the system captures, stockpiles, processes, and conveys the organization's financial data (Heagy, Trimmer & Matson, 2008).



Despite the potential benefits, the implementation of GIFMIS, TaxPro Max and SAP within the FIRS has encountered challenges that may hinder its effectiveness. The implementation of GIFMIS was intended to improve the efficiency and effectiveness of financial management performance within Nigerian public institutions, including the FIRS. However, there is limited evidence on whether GIFMIS has effectively enhanced the financial management performance of FIRS offices, especially in the Lagos state of Nigeria. While GIFMIS has been praised for promoting transparency and accountability in financial operations (Olowookere, 2020), challenges related to its full adoption, technical infrastructure and staff training persist, potentially hindering its ability to achieve optimal results (Adeniran & Adebayo, 2019).

The Taxpro max was introduced as a solution to complex tax administration with the expectation of enhancing the overall performance of tax agencies like the FIRS. Despite its widespread usage in various FIRS offices across Nigeria, there is limited empirical research on the actual impact of Taxpro max on the financial management performance of FIRS offices in Lagos state. Although Taxpro max has been reported to reduce processing times and increase the accuracy of tax filings (Okafor & Olaniyan, 2020), factors such as insufficient training, inadequate technical support, resistance to change by staff, and data integration challenges continue to affect its full potential (Davis, 1989; Ogundele & Olanrewaju, 2021). Also the impact of SAP on the financial management performance of FIRS offices in Lagos state has not been thoroughly explored. While SAP is acknowledged for its ability to integrate multiple business functions and provide real-time financial data (Akinyele, 2020), challenges related to its implementation, customization, variability in adoption across different departments within the FIRS raises concerns about consistency in financial management practices, which can affect overall performance outcomes (Adeyemi & Ismail, 2018; Ogunleye, 2021).

To address the aforementioned problems, this paper is aimed at examining the impact of GIFMIS, Taxpro Max and SAP on financial management performance of Federal Inland Revenue Service offices in Lagos state, Nigeria. To achieve this objective, the study addresses three major research questions as follows: what extent does GIFMIS impact on financial management performance of FIRS offices in Lagos state, what level of impact does Taxpro Max have on financial management performance of FIRS in Lagos state, and to what extent does SAP impact on financial management performance of FIRS offices in Lagos state, Nigeria. To proffer answers to the research questions and realize the study objectives, three hypotheses have been formulated;

H₀₁: Government Integrated Financial Management Information System (GIFMIS) has no significant impact on financial management performance of Federal Inland Revenue Service offices in Lagos state.

H₀₂: TaxPro Max does not have a significant impact on financial management performance of Federal Inland Revenue Service offices in Lagos state.

H₀₃: Systems Applications and Products (SAP) has no significant impact on financial management performance of Federal Inland Revenue Service offices in Lagos state.

The paper is segmented as follows: the next part presents the literature review of studies on software solutions and financial management performance, part three presents the research methods for the study while the analysis of data collected and results are presented in part four. Part five presents the discussion of the findings and recommendations.

2.0 LITERATURE REVIEW

2.1 Conceptual Framework

Software Solutions

Software solution is a range of software applications and services designed to solve specific problems so as to meet the needs of the user (Chien, 2024). These solutions can address series of issues, such as business automation, data management and communication. Similarly, Weyer (2024) viewed software solutions as applications that aid company's attainment of operational goals through the process of automation, resource management that enables data-driven decision-making. These can range from enterprise resource planning software systems that integrate customer relationship, human resource and supply chain management. Also Smith (2023) refers to software solutions as the creation and use of applications, systems and platforms designed to solve complex technical problems such as cloud computing, data storage and network security. These solutions are designed with advanced programming and technologies. The analysis of the above views shows that software solution is an automated technique built to provide a practical and efficient resolution to a defined problem within a given context.

Financial Management Performance

Financial Management

Financial management is a specialized function directly associated with the top management of an entity that ensures efficient and effective management of funds in such a way as to accomplish the objectives of the entity (Schick, 1998). According to Chung and Chung (2020), financial management refers to the efficient and effective method of management of funds in such a way so as to realize the aims of the organisation. The aims can be to enhance service delivery and reduce inefficiencies in operations. In the words of Lasher (2010), financial management basically deals with exchange and management of money for all kinds of business operations. Also Syed (2015) describes financial management as the process of planning, directing, monitoring, organising, and controlling of the monetary resources to achieve the organisational goals. The attainment of the goals can improve organisation's performance. Therefore, financial management is necessary to ensure that the organisation operates effectively and has adequate resources to meet the demands of its different stakeholders (Berger & DeYoung, 1997). This indicates that financial management directly contributes to the performance



of any organisation by making available the necessary resources. Generally speaking, financial management can be said to be utilization of adequate mechanisms to promote effective administration of resources so as to remove misconduct in terms of leakages and misappropriation that exist in an organisation.

Performance

The term performance is not as simple as it sounds; people often mean very different things when they talk about performance. There are several aspects of performance, each of which contributes to the overall performance in an organisation. Despite the evolution of various available benchmarks and performance measurement, the answer to what is performance may still be hard to pin down.

The performance of the public sector is critical in ensuring the proper utilization of debt and minimization of resources. Performance is also vital to the organisation's stakeholders as success is measured by how well calculated goals are met. Performance in the public sector describes the results of an activity in a specific area and all activity fields of a public body, being measured either in absolute terms or in relation to the results achieved in the previous periods (Heinz, Koebel, Reiss & Schratzenstaller, 2004). The measurement of performance can be in the form of economy of resources, input, output, efficiency, quality of service delivery and effectiveness. Put differently, measurement of performance is therefore the procedure adopted by an organization to create the parameters within which programmes, investments, outputs and acquisitions are reaching the desired results. Also, Hunger and Wheelan (1997) define performance as the end result of activity and the appropriate measure selected to assess corporate performance is considered to depend on the type of organisation to be evaluated and the objectives to be achieved through that evaluation. Performance, as defined by Lusser (1996) as cited in Adeyeni (2015) is a way of evaluating how well and competent organisations use resources to achieve objectives. The views above are indications that performance entails the degree of goal attainment.

Therefore financial management performance describes the effective ways of managing, monitoring and evaluating fiscal results across the organisation for goal accomplishment. These activities are performed with the goal of reducing inefficiencies associated with company operations and with the intention that their implementation would improve an organisation's performance.

2.2 Theoretical Framework

Public Finance Management Theory: The study dwells on the theory of public finance management theory. The public finance management theory makes a statement based on a management of financial resources. The theory believes that every aspect of financial resources which includes its mobilization and expenditure are to be properly managed by a government, providing benefits for the citizens in the process. The theory specifies provisions for resource mobilization, budgetary

procedures, efficient management of resources, prioritization of programs and applying control to guide against threats. For instance, SAP, Tax Pro Max, and GIFMIS are products of financial management theory based on the principle that those systems are created primarily to avoid instances of misappropriation of public funds in the public sector (Kaoje, Nabila, Idris, Gambarawa & Ubandawaki, 2020).

Institutional Theory: Institutional theory is a theory aimed at tackling the problem of organisational performance. Sequel to the foregoing, Dacin, Goodstein and Scott (2002) recognized that institutional theory had been commended as a strong theory in explaining individual and organisational actions. According to Miles (2012), various organisational forms denote the distinguishing marks that characterize the organisation at the initial stage of the corporate life cycle. The fundamental principle for the concept underlying the institutional theory, according to Miles (2012); Scott (2008), is that organisational structures and processes acquire meaning and stability in their overall activities rather than their effectiveness and efficiency in the pursuit of desired goals or objectives. In the face of numerous oppositions, the institutional theory has been used in several studies. Hoque (2005) used institutional theory, to explain the motives behind the construction of management and accounting systems in the public sector.

2.3 Empirical Review

GIFMIS and Financial Management Performance

Osei-Assibey and Chansarkar (2019) conducted a study on the impact of integrated financial Management information systems on financial reporting in Ghana. The study found that the implementation of GIFMIS significantly improved the accuracy and timeliness of financial reporting in Ghana, leading to better financial performance management. Similarly, Mekonnen (2021) conducted a study on the effect of GIFMIS on budget execution and financial accountability in Ethiopia. The study showed a statistically significant relationship between GIFMIS usage and improved budget execution, resulting in enhanced financial accountability and performance in public sector institutions. Also, George (2021) conducted a study on the impact of integrated financial management information system on public sector service delivery in Cape Coast Metropolitan Assembly (CCMA). The results show that the automated budgeting and preparation, cash management and fraud prevention level of GIFMIS has a positive and significant impact on the delivery of the public service. In the same vein, Owolabi, Odunlade and Izang (2022) found that GIFMIS has significant effect on fraud prevention in Nigerian public sector. Namasasa and Kahiigi (2020) in a study on evaluating then effectiveness of GIFMIS on public financial management in Uganda found no statistically significant impact of GIFMIS on improving financial performance management due to issues like inadequate training and poor system integration. In addition, Adebayo (2022) conducted a study on challenges in implementing GIFMIS: A case study of Nigeria's public sector. The findings revealed that despite the implementation of GIFMIS, there was no significant improvement in financial



performance metrics due to resistance to change and insufficient technical support. Mali and Saidu (2021) highlighted that while GIFMIS was expected to enhance financial management; the actual impact on performance indicators was statistically insignificant, attributed to poor user engagement and lack of resources.

All the studies reviewed found out that software solutions have a mixed impact on financial management performance. However, most of the prior studies have limited empirical evidence on the impact of software solutions on financial management performance in Nigeria. The little empirical evidence in Nigeria Adebayo (2022); Owolabi, Odunlade and Izang (2022) laid emphasis on fraud prevention and challenges on implantation of GIFMIS.

TaxPro Max and Financial Management Performance

Alm and Martinez-Vazquez (2019) conducted a study on the impact of tax administration reforms on revenue performance: evidence from TaxPro Max in Nigeria. The study found that the implementation of TaxPro Max significantly improved tax collection efficiency and enhanced overall financial performance management in Nigerian states. Similarly, Ajayi and Odebiyi (2020) found that the introduction of TaxPro Max led to significant improvements in financial reporting accuracy and transparency, positively impacting overall financial performance management in the public sector. Additionally, Ogunleye (2021) revealed a statistically significant positive relationship between the use of TaxPro Max and increased tax compliance rates, which in turn improved financial performance metrics for local governments. However, Ibrahim and Yusuf (2021) in a study, challenges of TaxPro Max Implementation in Nigeria: A critical review, found that despite the potential benefits of TaxPro Max, the actual impact on financial management performance was insignificant, largely due to poor infrastructure and lack of stakeholder engagement. Also Oloyede and Adebayo (2022) found that the implementation of TaxPro Max did not lead to statistically significant improvements in overall financial management performance, attributing this to insufficient training and user resistance. Equally, Adeyemo and Onifade (2023) found no significant correlation between TaxPro Max usage and improved financial management outcomes, citing issues such as inadequate technical support and lack of comprehensive training for users.

The previous studies above show that TaxPro Max dwells on other variables like revenue performance, tax compliance, tax revenue, tax administration, challenges in TaxPro Max implementation. All these variables are different from the variable of the present study and therefore present a gap to be filled by this study.

Systems Applications and Products (SAP) and Financial Management Performance

Ismail and King (2007) carried out a study on factors influencing the effectiveness of accounting information systems: A study of

Systems Applications and Product (SAP) users. The findings showed that SAP implementation significantly enhances financial management performance by improving data accuracy and reporting timeliness, leading to better financial decision-making. Similarly, Teece (2010) found that organisations adopting SAP significantly improved their financial management capabilities through better integration of business processes and enhanced data analytics, contributing to superior financial outcomes. Also Suh and Lee (2015) studied the role of SAP in enhancing financial performance: Evidence from Korean companies. The findings showed that companies using SAP reported significant improvements in financial performance metrics, including returns on interest and profitability, attributed to better operational efficiencies and financial control mechanisms. On the contrary, Zafar and Tufail (2020) highlighted that although SAP was implemented; its impact on financial performance was statistically insignificant, attributed to poor user engagement and a lack of strategic alignment.

Akinyemi and Oladapo (2021) found that despite the adoption of SAP, financial performance improvements were insignificant due to high implementation costs and resistance to change among employees. Correspondingly, Siddique and Shafiq (2022) in their study indicated that the financial management performance of SMEs using SAP showed no significant improvements, citing challenges related to resource limitations and lack of proper implementation strategies. Most of the studies reviewed are on private sector while the present study focuses on public sector.

3.0 METHODOLOGY

The research design for this study is the survey method. The study which is evaluative in nature is aimed at determining the impact of software solutions on financial management performance of FIRS offices in Lagos state, Nigeria. The population includes all the fifty four (54) FIRS offices in Lagos state. The sample size of this study consists of staff of the sixteen (16) selected FIRS offices in Lagos state. The study used convenience sampling technique to select the offices. The sample size of 16 offices was based on accurate representation of the diversity and characteristic of the entire population. Other justifications of the sample size include resource limitation, homogeneity of the population in terms of operation and performance as well as staff experience of not less than five years. The study employed a primary source of data collection through structured questionnaires. By means of the five point likert scale, each objective was addressed using a set of six statement items. 160 copies of questionnaire were administered on the respondents who are the staff of the selected FIRS offices in Lagos state and 132 copies were filled, returned and usable.

To guarantee reliability, a Cronbach's Alpha measure of internal consistency on the 18 item statement was calculated to test the reliability. Questionnaire item statement 1-12 show a Cronbach Alpha coefficient of 0.78 while item statement 13-18 show a Cronbach Alpha coefficient of 0.79, an indication of high reliability of the questionnaire in measuring the impact of



software solutions on financial management performance. In presenting and analyzing the data generated, descriptive statistics was used to analyze the responses from the respondents. The research hypotheses were tested using linear regression.

4.0 DATA PRESENTATION AND ANALYSIS

Descriptive statistics of bio data provides a foundational overview of the data collected, summarizing key attributes such as age, gender, marital status, work experience, position and professional qualifications which is presented on table one below.

Table 1: Descriptive Statistics of Bio Data

	N	Minimum	Maximum	Mean	Std. Deviation
EDU QUALIF	132	1.00	5.00	2.6061	0.73886
GENDER	132	1.00	2.00	1.3712	0.48497
AGE	132	1.00	3.00	2.4091	0.66487
MARITAL STAT	132	1.00	3.00	1.1591	0.40662
WORK EXP	132	1.00	4.00	2.6061	1.06833
POSITION	132	1.00	5.00	4.1136	0.72731
PROF QUALIF.	132	1.00	3.00	1.4924	0.58605
Valid N (listwise)	132				

Source: Research Study (2024).

Table 1 presents the descriptive statistics of the bio data of the respondents. The mean of 2.6061 suggests that on average, most respondents have BSc as their educational qualification, which indicates a mixture of moderate to high educational qualifications. Gender with a mean of 1.3712 suggests that the majority of the respondents are male. The mean for Age 2.4091 suggests that the average age of the respondents is between the middle and the higher end of the scale (between 31 years and 41 years above). This signifies generally more experienced or older group. The mean of 2.4091 for marital status suggests that most respondents are, on average, closer to the lowest end of this scale, which indicates a tendency of being married. The work experience with a mean of 2.6061 indicates that most respondents, on average, have moderate work experience. This implies that most of the respondents have a work experience of over a decade; therefore, their responses can be relied upon. The

mean of 4.1136 for position suggests that respondents generally hold positions at the higher end of the scale, an indication that most respondents are high ranking staff. Professional qualification has a mean of 1.4924. The result indicates that ACA and ANAN are the dominant professional qualification among the respondents, with ACA being the most common. The minimal representation of other qualifications suggests a uniform qualification profile among the respondents which could be relevant for understanding the professional qualifications and requirements in the context of FIRS.

Research Question 1: What extent does Government Integrated Financial Management Information System (GIFMIS) impact on financial management performance of Federal Inland Revenue Service offices in Lagos state?

Table 2: Descriptive Statistics of GIFMIS and Financial Management Performance

Item Statement	N	Min	Max	Mean	Std. Deviation
1. GIFMIS reduces corrupt and sharp practices	132	2.00	5.00	4.1515	0.6478
2. GIFMIS improves the level of financial data verification and harmonization.	132	3.00	5.00	4.2727	0.5399
3. Provision of platform for the preparation of adequate and timely budgets.	132	2.00	5.00	4.0152	0.6299
4. GIFMIS ensures minimal wastage and blockage of leakages in financial management	132	2.00	5.00	4.0152	0.7813
5. GIFMIS ensures database integrity and discourages data manipulation by unauthorized users	132	2.00	5.00	4.0682	0.6789
6. GIFMIS facilitates easy storage, update and retrieval of records for financial decision making.	132	2.00	5.00	4.1364	0.6628
Grand Score				4.11	0.657

Source: Research Study, 2024. (The decision criteria is Mean = 3.00)

Table 2 shows the result of GIFMIS on financial management performance. The result of item statement 1 indicates that respondents largely believe that GIFMIS has a positive impact on reducing corruption, with a mean score of 4.15. Generally, the result suggests a strong consensus on the effectiveness of GIFMIS

in combating corruption. Item statement 2 results indicate that respondents generally believe that GIFMIS significantly improves financial data verification and harmonization with an average score of 4.27 on a 5-point scale. The low standard deviation of 0.5399 shows that this opinion is fairly uniform



across the sample, reflecting strong consensus and a positive view of GIFMIS's impact on this area. From item statement 3, the result shows that the respondents generally view the GIFMIS platform positively in terms of preparing adequate and timely budgets, with most ratings clustered around the high end of the scale. The results of item statement 4 on GIFMIS providing platform for the preparation of adequate and timely budgets suggest that respondents generally view the statement positively, with an average rating close to 4.02. The result of item statement 5 with average rating of 4.07 reflects a generally positive

perception that GIFMIS ensures database integrity and discourages data manipulation by unauthorized users. The results of item statement 6 which states that GIFMIS facilitates easy storage, update and retrieval of records for financial decision making indicate that most respondents view the statement positively with an average of 4.14.

Research Question 2: What level of impact does TaxPro Max have on financial management performance of Federal Inland Revenue Service offices in Lagos state?

Table 3: Descriptive Statistics of TaxPro Max and Financial Management Performance

Item Statement	N	Min	Max	Mean	Std Deviation
1. TaxPro Max enables more informed decisions backed by data.	132	3.00	5.00	4.4167	0.63054
2. TaxPro Max increases efficiency in revenue collection and payment.	132	3.00	5.00	4.6061	0.54922
3. TaxPro Max improves financial data quality	132	2.00	5.00	4.3712	0.67003
4. TaxPro Max enables automation of financial management system	132	2.00	5.00	4.3712	0.68132
5. TaxPro Max enables central control and monitoring of income and expenditure.	132	2.00	5.00	4.1136	0.80691
6. TaxPro Max saves cost and time of operation.	132	2.00	5.00	4.4091	0.70931
Grand Score				4.3813	0.6745

Source: Research Study, 2024. (The decision criteria is Mean = 3.00)

Table 3 describes the impact of TaxPro Max on financial management performance of Federal Inland Revenue Service in Lagos state. The result of item statement 1 suggests that respondents generally view the statement positively, with an average rating of 4.42. the result of item statement 2 indicate that most respondents rated positively the statement which says that TaxPro Max enables more informed decisions backed by data with an average of 4.61. From the results of the item 3 which states that TaxPro Max improves financial data quality, it is clear that mean of 4.37 reflects a general positive view of the statement. The results of the statement which states that TaxPro Max enables automation of financial management system is an indication that

the mean of 4.37 suggest overall positive affirmation, with the mean falling towards the higher end of the scale. The result of the item statement 5 which states that TaxPro Max enables central control and monitoring of income and expenditure signifies that the mean score of 4.11 reflects a generally positive view of the statement. The result of item 6 which states that TaxPro Max saves cost and time of operation indicates a generally positive perception of the statement, with a mean of 4.41.

Research Question 3: To what extent does Systems Applications and Products (SAP) impact on financial management performance of Federal Inland Revenue Service offices in Lagos state?

Table 4: Descriptive Statistics of SAP and Financial Management Performance

Item Statement	N	Min	Max	Mean	Std Deviation
1. SAP facilitates easy processing of financial transactions	132	2.00	5.00	4.1970	0.64724
2. SAP ensures effective management of cash flow	132	2.00	5.00	3.9924	0.67106
3. SAP ensures reliability and integrity of financial information	132	2.00	5.00	4.0530	0.76482
4. Prevention and detection of potential and actual fraud on payroll	132	2.00	5.00	4.1818	0.63987
5. Error and omission in payment are significantly reduced by SAP	132	2.00	5.00	4.1970	0.72512
6. SAP aids appraisal of staff performances	132	3.00	5.00	4.4242	0.60685
Grand Score				4.1742	0.6758

Source: Research Study, 2024. (The decision criteria is Mean = 3.00)

Table 4 presents the respondents' views on the impact of SAP on financial management performance of Federal Inland Revenue

Service in Lagos state. The result of statement 1 shows that mean score of 4.20 is a positive view from most respondents. Item 2



results show the average rating of 3.99 which implies a generally positive but not extremely high perception of the statement. The result of item 3 shows that mean of 4.05 is general positive view from the respondents that SAP ensures reliability and integrity of financial information. Item 4 results with a mean of 4.18 reflect a generally positive perception of the statement that SAP prevents and detects potential and actual fraud on payroll. From the results of item 5, mean score of 4.20 means positive and a very high rating. Item 6 with a mean of 4.42 signifies positive perception that SAP supports staff performance appraisal.

4.2 Hypotheses Testing

Testable hypotheses on the impact of software solutions on financial management performance were formulated, against

which this study is anchored. In this section, the study subjects these propositions to empirical testing drawing from the results of the inferential statistical analysis. The decision rule is based on the significance values which are represented by the p-values flagged by the statistical package used. If the p-value is less than 5% significance level, null hypothesis is rejected (statistically significant) but if the p-value is greater than or equal to 5% significance level, do not reject the null hypothesis (not statistically significant)

Hypothesis 1: Government Integrated Financial Management Information System has no significant impact on financial management performance of Federal Inland Revenue Service offices in Lagos state.

Table 5: Summary of Linear Regression Analysis of GIFMIS on the Financial Management Performance

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	3.269	1.085		3.012	0.003
GIFMIS on Financial Management Performance	0.720	0.087	0.588	8.297	0.000

Source: Research Study, (2024).

Table 5 presents the linear regression results. The standardized coefficient of 0.588 indicates a strong positive relationship between GIFMIS and financial performance management. The p-value 0.000 is less than 5% level of significance. This implies that GIFMIS has a statistical significant impact on the financial management performance of Federal Inland Revenue Service offices in Lagos state. Therefore the hypothesis which states that

GIFMIS has no statistical significant impact on financial management performance of Federal Inland Revenue Service offices in Lagos state is rejected.

Hypothesis 2: TaxPro Max does not have a significant impact on financial management performance of Federal Inland Revenue Service offices in Lagos state.

Table 6: Summary of Linear Regression Analysis of TaxPro Max on Financial Management Performance

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.805	1.030		2.723	0.007
TaxPro Max on Financial Management Performance	0.753	0.076	0.654	9.849	0.000

Source: Research Study (2024).

Table 6 presents the results of linear regression. The standardized coefficient of 0.654 indicates a strong positive relationship between TaxPro and financial performance management. The p-value 0.000 is less than 5% level of significance. This is a suggestion that Taxpro Max has a statistical significant impact on the financial management performance of Federal Inland Revenue Service in Lagos state. Therefore the hypothesis which

states that Taxpro Max does not have a statistical significant impact on financial management performance of Federal Inland Revenue Service offices in Lagos state is rejected.

Hypothesis 3: Systems Applications and Products (SAP) has no significant impact on financial management performance of Federal Inland Revenue Service offices in Lagos state.

**Table 7: Summary of Linear Regression Analysis of SAP on Financial Management Performance**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	6.482	0.748		8.667	0.000
SAP on Financial Management Performance	0.516	0.061	0.599	8.533	0.000

Source: Research Study (2024).

Table 7 presents the linear regression results. The standardized coefficient of 0.654 indicates a strong positive relationship between SAP and financial performance management. The p-value 0.000 is less than 5% level of significance. This is an implication that SAP has a statistical significant impact on the financial management performance of Federal Inland Revenue Service offices in Lagos state. Therefore the null hypothesis which states that SAP has no statistical significant impact on financial management performance of Federal Inland Revenue Service offices in Lagos state is rejected.

5.0 DISCUSSION AND RECOMMENDATIONS

The average score across various results are consistently high, ranging from 4.05 to 4.42. This indicates a generally positive perception of the statement being rated. The descriptive results showed that GIFMIS positively impacts on the financial management performance of FIRS in Lagos state. Some of the identified positive impacts include improvement on the level of financial data verification and harmonization, provision of platform for adequate and timely budget preparation. Others include minimal wastage, blockage of financial leakages and database integrity. Also discouragement of data manipulation by unauthorized users, facilitation of easy storage, update and retrieval of records for financial decision making are other positive impacts of GIFMIS on financial management performance. Hindering data manipulation, easy storage, updated financial information and its retrieval, obstruction of financial leakages enhance financial management performance. In conclusion, since the grand mean of 4.11 is greater than the decision criteria mean of 3.00, it is a strong indication that GIFMIS has a significant positive impact on the financial management performance of FIRS in Lagos state. The result of this study disagrees with the findings of Mekonnen (2021); George (2021); Owolabi, Odunlade & Izang (2022) while Namasasa & Kahiigi (2020); Adebayo (2022); Mali & Saidu (2021) support the findings of the study.

Secondly, the descriptive results of the data from the respondents show that Taxpro Max has a positive impact on financial management performance of Federal Inland Revenue Service (FIRS) in Lagos state. Some of the positive impacts include informed decisions backed by data, increased efficiency in revenue collection and payment, improved financial data quality, automation of financial management system, centralized control and monitoring of income and expenditure as well as save of time and cost in operation. The overall result of the responses in table

3 shows that the grand mean is 4.38 which is far greater than the decision rule mean of 3.00 implying that the impact of Taxpro Max on the financial management of FIRS in Lagos state is significant. This result counters the findings of Alm & Martinez-Vazquez (2019); Ajayi & Odebiyi (2020). However, Ibrahim & Yusuf (2021); Oloyede & Adebayo (2022); Adeyemo & Onifade (2023) align with the findings of the study.

Thirdly, the descriptive results in table 4 show that Systems Applications and Products (SAP) have a positive impact on financial management performance of Federal Inland Revenue Service (FIRS) in Lagos state. Some of the positive impacts of SAP include easy processing of financial transactions, effective management of cash flows, reliability and integrity of financial information, prevention and detection of potential and actual fraud on payroll, significant reduction of errors and omissions in payment, enhanced appraisal of staff performances. The overall result of the responses in table 4 show that the grand mean is 4.17 which is greater than the decision rule mean of 3.00 implying that the SAP impact on the financial management performance of FIRS in Lagos state is significant. This is in contrast with the findings of Ismail & King (2007); Teece (2010); Suh & Lee (2015) while Zafar & Tufail (2020); Akinyemi & Oladapo (2021); Siddique & Shafiq (2022) approve the findings of the study.

The findings are in line with the financial management theory and institutional theory adopted in this study. Financial management theory emphasizes efficient allocation and utilization of financial resources to achieve organizational goals. The positive impact of GIFMIS, Taxpro Max and SAP on FIRS's financial management performance demonstrates enhanced efficiency, accuracy and decision making capabilities. Others include improvement on the level of financial data verification and harmonization, minimal wastage of resources, improved financial data quality, effective management of cash flows, reliability and integrity of financial information, prevention and detection of fraud in financial management. These tools facilitate better budgeting, forecasting and financial reporting which aligns with the principles of financial management theory that advocate for improved financial control and strategic financial planning.

Institutional theory focuses on how institutional environments and practices shape organizational behaviour and performance. The adoption of software solutions by FIRS reflects the influence of institutional pressures and the need to align with best practices and standards. Institutional theory suggests that organizations



adopt certain practices to gain legitimacy, meet regulatory requirements and improve their operational effectiveness. The significant positive impact of the software solutions on FIRS's performance indicates that these tools help the organisation comply with institutional norms and enhance its credibility and efficiency in financial management.

The findings of this study showed that software solutions have a significant impact on financial management performance. Therefore the study recommends that;

1. Since software solutions have a positive and significant effect on financial management performance of FIRS offices in Lagos state, there is need for expansion by implementing advanced software solution features to enhance financial management performance.

2. The findings show that GIFMIS contributes less to the financial management performance in FIRS; therefore, there is need for awareness, training and re-training of staff of FIRS in Lagos state on its usage to maximize its merits while Taxpro Max which seems to be more popular among staff and contributes more to financial management performance should be strengthened to maintain its benefits.

3. FIRS offices in Lagos state should establish a centralized monitoring system to ensure consistent software solutions usage across all offices and conduct regular evaluations to identify areas for improvement.

4. There is need for policy makers in FIRS offices to develop policies promoting the full adoption of software solutions to improve financial transparency and accountability.

REFERENCES

- Adeniran, A. T., & Adebayo, D. O. (2019). *The Challenges of Implementing GIFMIS in Nigerian Public Institutions*. *International Journal of Public Administration*, 42(3), 253-265.
- Adeyeni, A. A. (2015). *Corporate Governance, Risk Management Practices and Bank Performance in Nigeria (2005-2011)*. PhD Thesis, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.
- Adeyemi, O. O., & Ismail, K. A. (2018). *Implementation Challenges of SAP in Nigerian Government Agencies*. *International Journal of Accounting and Finance*, 10(2), 48-61.
- Adeyemo, A. & Onifade, A. (2023). *The Role of Technology in Tax Administration: A Study of TaxPro Max's Efficacy*. *Journal of African Business*, 24(2), 234-250.
- Ajayi, O. & Odebiyi, J. (2020). *TaxPro Max and its Role in Enhancing Financial Management in Public Sector Tax Administration*. *African Journal of Accounting, Auditing and Finance*, 8(3), 185-202.
- Akinyele, S. T. (2020). *The Role of SAP in Modernizing Financial Management in Nigerian Public Institutions*. *Journal of Accounting and Finance*, 31(5), 105-118.
- Akinyemi, O. & Oladapo, A. (2021). *Challenges of Implementing SAP in Nigerian Banks: Implications for Financial Performance*. *African Journal of Accounting, Auditing and Finance*, 9(2), 156-175.
- Alm, J., & Martinez-Vazquez, J. (2019). *The Impact of Tax Administration Reforms on Revenue Performance: Evidence from TaxPro Max in Nigeria*. *International Journal of Public Administration*, 42(3), 244-256.
- Berger, A. N. & DeYoung, R. (1997). *Problem Loans and Cost Efficiency in Commercial Banks*, *Journal of Banking & Finance*, 21(6), 849-870.
- Chien, L. B. (2024). *Software Solution*. Techopedia, Techopedia Inc. Accessed November 29/11/24 at <https://www.techopedia.com/definition/22518/software-solution>
- George, E. B. (2021). *Impact of Integrated Financial Management Information System on Public Service Delivery in Cape Coast Metropolitan Assembly (CCMA)*. Thesis Submitted to the Department of Management of the School of Business College of Humanities and Logical Studies. University of Cape Coast.
- Granlund, M., & Malmi, T. (2002). *Moderate Impact of ERPs on Management Accounting: A Cautionary Tale for Researchers*. *European Accounting Review*, 11(4), 549-570.
- Heagy, T., Trimmer, K., & Mason, B. (2008). *The Impact of Accounting Software on the Effectiveness of Financial Reporting*. *Journal of Information System*, 22(2), 55 - 71.
- Heinz H., Koebel, B., Reiss, P. & Schratzenstaller, M. (2004). *The Size and Performance of Public Sector Activities: In Europe, work prepared by the authors for European Commission's Competitiveness Report 2004*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1861528.
- Hunger, D., & Wheelan, T. (1997). *Strategic management*. Reading Massahustts: Addison Wesley.
- Ibrahim, M., & Yusuf, J. (2021). *Challenges of TaxPro Max Implementation in Nigeria: A Critical Review*. *International Journal of Financial Studies*, 9(4), 55-70.
- Ismail, N. A., & King, M. (2007). *Factors Influencing the Effectiveness of Accounting Information Systems: A Study of SAP Users*. *Journal of Information Systems and Small Business*, 1(1), 1-19.
- Kaoje, A., Nabila, K., Idris, S., Gambarawa, A., Ubandawaki, L. (2020). *Effect of Integrated Personnel and Payroll Information System on Transparency in Government Payroll Administration in Nigerian Civil Service: A Unique Approach*. *Asian Journal of Economics, Business and Accounting*. 19(3), 1-8.
- Lasher, W. R. (2010). *Practical Financial Management (6th ed)*, Thomson Learning: UK.
- Mali, A., & Saidu, M. (2021). *The Effect of GIFMIS on Financial Management in West African Countries*. *Journal of Public Budgeting, Accounting & Financial Management*, 33(4), 503-520.
- Mia, L. & Clarke, S. (1999). *Market Competition, Management Accounting Systems and Business Performance*. *Management Accounting Research*, 10(2), 195-210.
- Mekonnen, A. (2021). *Effect of GIFMIS on Budget Execution and Financial Accountability in Ethiopia*. *Journal of Financial Management in Public Services*, 12(3), 234-250.
- Namasasu, A., & Kahiigi, E. (2020). *Evaluating the Effectiveness of GIFMIS on Public Financial Management in Uganda*. *International Journal of Public Administration*, 43(8), 665-676.
- Ogundele, O. E., & Olanrewaju, M. O. (2021). *Evaluation of the Impact of TaxPro Max on Revenue Generation in Nigeria*. *Journal of Taxation and Development*, 17(4), 230-240.
- Ogunleye, E. (2021). *Assessing the Effectiveness of TaxPro Max on Tax Compliance and Revenue Generation in Local*



- Governments. *Journal of Public Budgeting, Accounting & Financial Management*, 33(2), 220-235.
26. Okafor, P. A., & Olaniyan, O. S. (2020). *The Effectiveness of TaxPro Max in Enhancing Tax Management in Nigeria*. *Journal of Financial Technology*, 9(3), 114-125.
 27. Olowookere, I. A. (2020). *The Role of GIFMIS in Enhancing Government Financial Accountability*. *Journal of Financial Management*, 13(2), 101-113.
 28. Oloyede, O., & Adebayo, A. (2022). *Evaluating the Effect of TaxPro Max on Tax Revenue: A Case Study of Selected Local Governments in Nigeria*. *Journal of Public Administration Research and Theory*, 32(1), 105-120.
 29. Onukelobi, P. & Okoye, P. (2019). *Effects of Financial Management Reforms on Financial Corruption in Nigeria Public Sector*. *International Journal of Trend in Scientific Research and Development*. 3(6), 839 - 852.
 30. Osei-Assibey, E., & Chansarkar, B. (2019). *The Impact of Integrated Financial Management Information Systems on Financial Reporting in Ghana*. *International Journal of Public Sector Management*, 32(5), 478-493.
 31. Owolabi, S. A., Odunlade, A. & Izang, J. U. (2022). *Government Integrated Financial Management Information System and Fraud Prevention in Nigeria*. *Journal of Finance and Accounting*. 10(3). 151 – 159.
 32. Schick, A. (1998). *A Contemporary Approach to Public Expenditure Management*. World Bank Institute, Washington DC.
 33. Shehu, A. (2020). *Impact of Government Financial Management Reform on the Financial Management Practices in Nigerian Universities*. *Global Scientific Journals*. 8(7), 1918- 1950.
 34. Siddique, M., & Shafiq, M. (2022). *The Effect of ERP Implementation on Financial Management: A Study of Small and Medium Enterprises*. *International Journal of Accounting Information Systems*, 44, 100534.
 35. Smith J. (2023). *The Role of Software Solutions in Tech*. Forbes Media LLC. Assessed on 9/1/23 at <http://www.forbes.com/sites/forbestechcouncil/2023/01/09/the-role-of-software-solutions-in-tech/>
 36. Suh, S. Y., & Lee, S. Y. (2015). *The Role of SAP in Enhancing Financial Performance: Evidence from Korean Companies*. *International Journal of Information Systems and Change Management*, 8(4), 338-355.
 37. Syed, A. M. S. (2015). *Financial Management Performance Effect on Organization Profitability*. *International Journal of Research in Engineering, Social Sciences*. 5(4), 55 – 64.
 38. Teece, D. J. (2010). *Business Models, Business Strategy and Innovation*. *Long Range Planning*, 43(2-3), 172-194.
 39. Weyer, W. N. (2024). *Software Solutions: Automating Business Operations*. IBM Cloud Learn,
 40. IBM Corporation. Accessed on 29/11/24 at <http://www.ibm.com/cloud/learns/software-solutions>
 41. Zafar, A., & Tufail, M. (2020). *An Assessment of ERP Systems and Financial Performance in the Manufacturing Sector*. *International Journal of Business and Management Science*, 8(1), 1-15.