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# Accounting Information System And Financial Performance Of Small And Medium Enterprises (SMES) In Rivers State, Nigeria

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## **ABSTRACT**

The aim of this study was to examine Accounting Information System and Financial Performance of SMEs in Rivers State, Nigeria. The study formulated three (3) hypotheses, and adopted descriptive research design while population and sample was from three (3) SMEs businesses in Obio Akpor Local Government of Rivers State that have been fully operational as at year 2020. Accounting information system was proxied with Timeliness of Accounting information system, Feedback from accounting information system and accuracy of accounting information system, while financial performance was proxied with return on investment (ROI). The study employed structured questionnaire as the research instrument to collect data. 120 copies of questionnaire were used for data gathering. Data collected were presented using simple percentage and table while Spearman rank order correlation analysis with the aid of SPSS statistical tool was used to test the hypothesis formulated to achieve the objective of the study. The result revealed that timeliness of Accounting Information System has a significant relationship with return on investment of SMEs; the result revealed that the feedback of AIS has a significant relationship with return on investment of SMEs in Nigeria; the result revealed that accuracy of AIS has significant relationship with return on investment a proxy for Financial Performance of SMEs in Nigeria. The study concluded that Accounting Information systems enhances financial performance of SMEs in Rivers State, Nigeria. The study recommended among others that since AIS has significant impact on Financial Performance of SMEs, they should adopt sound accounting practices to their operation so as to enhance their financial performance.

**Keywords:** Accounting Information System (AIS), Financial Performance, Rivers State, Nigeria, Small Medium Enterprises (SMEs)

## **1. INTRODUCTION**

Accounting information system (AIS) is a tool that helps organisational management to improve its control on the firm's operations and to develop its performance. AIS involves identifying, collecting, processing and delivering the accounting information to stakeholders for decision making throughout all organizational levels. AIS is also seen as a system that is used to record the financial transactions of a business or organization. This system combines the methodologies, controls and accounting techniques to

track financial transactions and to provide internal and external reporting data as well as helping the preparation of financial statements with capabilities to improve organizational performance (Pérez, Urquía & Muñoz 2010). Traditional legacy AISs were mainly paper-based systems and seems inappropriate for today's rapidly changing business environment. Information Technology (IT) revolution has transformed the nature of business operation, including accounting, to be led by IT and Information Systems (IS) applications. The diffusion of such applications enhances the financial performance and maintains transparency within the business organizations while providing continuous access to the financial reports throughout the financial year (Melitski & Manoharan, 2014). Moreover, effective use of such applications can improve customer satisfaction which ultimately leads to organizational success. Lots of other benefits for AIS have been cited in the literature including: Improved quality, cost reduction, increasing the speed of services, informed decisions and more effective information flow (Rehab 2018). AIS could provide management with their needs of valuable information that are timely, relevant, verifiable, and accurate to enable them to make better decisions (Al-Adaileh, 2018).

Accounting Information Systems characteristics are defined in terms of the availability of those characteristics and user satisfaction is a surrogate measure that is applied for measuring the performance of accounting information system. Accounting is a system that provides information concerning the entity to a variety of interested users. The purpose of accounting information is to enable the users to make informed judgments. Since every decision involves several alternatives, accounting information must assist the user to decide his course of action. Accounting is a process which with the help of accounting records produces financial statements. The Management is multiple foundation of knowledge whether in area of theory or practice which means that the theories, methodology and related models are based on principles of combination of scientific subjects such as economics, statistics, psychology, management accounting etc. (Hadi 2014). In management literature, the important duties of managers consist of planning, organizing, leading, supervising, controlling and decision making. Some of the management philosophers consider the decision making as foundation and basis of duties of a manager and some consider decision making as one of the main duties of managers. The importance of decision making in management has become mooted in such way that some people consider management equal to decision making (Hadi 2014).

Accounting Information System (AIS) as a computer- based application, accompanies itself with innovative and modern ways of accounting practices which most business owners especially in developing countries are not prepared for or find it very difficult to adopt. Yet, organizations are designing even more sophisticated Accounting Information Systems to meet up with strategic goals and enhanced performance (Eb, Pretorious & Zuva, 2013). Typical problems faced by organizations particularly in developing countries in the adoption of computerized accounting system are lack of capital and technological obsolescence, limited financial resources, management information, limited scale economies and management's IT-oriented behaviour, and lack of funds to b/improve skills (Malaranggeng, 2019; Levy et al., 2011; Francalanci & Morabito, 2018; Marriot & Marriot, 2015).

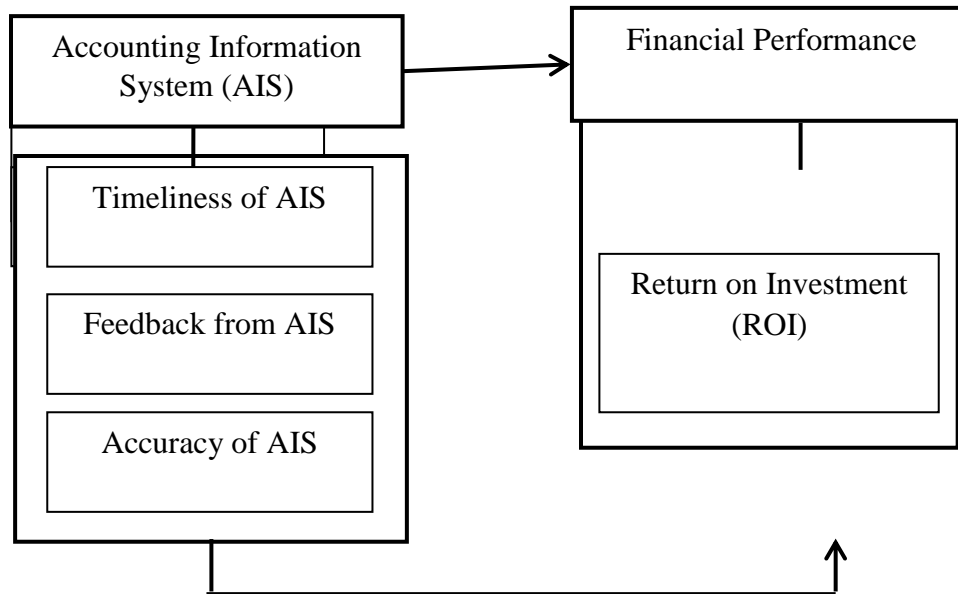
Generally, when we talk about performance we mean to know the stand or how well a work was done. The best way of managing risk is by making good decisions. Correct decision making depends on accurate information and proper analysis of financial statement. Financial performance is a combination of an organization's financial health, its ability and willingness to meet its long term financial obligations and its commitments to provide quality services in the foreseeable future. In a broader sense, financial performance refers to the degree to which financial objectives are accomplished. Financial managers need the financial and accounting data provided by AIS to evaluate the firm's past performance and to map future plans. The outcomes of AIS which primarily includes financial reports, are required at different levels of management and by other stakeholders. In fact, the outcomes of an AIS feeds into various decision streams at operational, tactical, and strategic levels of the organization. Users require financial and related information with various degrees of detail and with various levels of analysis. Small and medium sized enterprises (SMEs) play a critical role in our economy through generation of employment, contribution to growth of the Gross Domestic production (GDP), innovations and stimulation of other

economic activities. Therefore, it is important for developing countries to accelerate the growth of SMEs in order to gain sustainable development. In the context of SMEs, accounting information is important to help firms manage their short – term problems in critical areas such as costing, expenditure and cash flow by providing information to support planning, monitoring and decision making (Mitchelle et al., 2019, Marriot & Marriot, 2015). Thus, financial reporting system is necessary to ensure that the SMEs economic resources are used effectively and efficiently in pursuit of its goals. In addition, there is need in SMEs for skills in financial analysis which will allow financial statements to be read and understood, whether they contain historical or forecast information.

Accounting Systems play a critical role in the success of a business firm, as they provide information necessary in supporting the firm to achieve the expected goals. It has been emphasized that AIS produces useful information which serve as a basis for the management strategic decision making and in exercising control of firm’s activities in order to achieve their goals (Naranjo, 2014).

Every organization today seek to improve profit, market share and quality through applying the available IT tools. AIS – as one of these tools - is an important system that has a crucial role as the most important source of internal information. It has a great potential to enhance the success of the process of decision making which is seen as the most important factor for the achievement of the organisational goals (Akgun&Kilic, 2013). Hafnawi 2018, recorded that for AIS to be effective and efficient in measuring financial performance, it has to possess the following characteristics of timeliness, feedback, flexibility and accuracy. Against this backdrop, the study tends to evaluate the impact of AIS on the Financial Performance of SMEs in Rivers State, Nigeria.

### 1.1 Conceptual Framework



**Fig. 1.1** Conceptual Framework for the relationship between Accounting Information System and Financial Performance of SMEs in Rivers State.

**Source:** *Researcher’s Concept, 2024*

The conceptual framework for this study comprises of two variables; Accounting Information System (independent variable) and financial performance (dependent variable). The measures used are dimensions of Accounting Information System are Timeliness of Accounting Information System, Feedback from accounting information system, and Accuracy of Accounting Information System, whilst the proxy for financial performance is Return on Investment (ROI). The conceptual frame work highlight and shows the interrelationship between the dimension of the independent variable and the measures of

the dependent variables of the study. The researcher in this study aims to ascertain the extent and degree to which the dimension of the independent variables enhances the measure of the dependent variables.

### **1.3 Aim and Objectives of the Study**

The broad aim of this study was to examine the relationship that exist between Accounting Information System and Financial Performance amongst SMEs in Rivers State, Nigeria. The specific objectives of the study are to:

1. examine whether timeliness of AIS enhances the return on investment of SMEs in Rivers State, Nigeria.
2. determine whether feedback from AIS has impact on return on investment of SMEs in Rivers State, Nigeria.
3. evaluate whether the accuracy of AIS enhances the return on investment of SMEs in Rivers State, Nigeria.

### **1.4 Research Questions**

In order to achieve the objectives of this research, the following questions were raised

1. Does timeliness of AIS enhance the return on investment of SMEs in Rivers State, Nigeria?
2. Does the feedback from AIS has impact on return on investment of SMEs in Rivers state, Nigeria?
3. Does the accuracy of AIS enhances return on investment of SMEs in Rivers State, Nigeria?

### **1.5 Research Hypotheses**

The following null hypotheses were formulated for the study.

H<sub>0</sub>1: Timeliness of AIS has no significant relationship with return on investment of SMEs in Nigeria.

H<sub>0</sub>2: Feedback from AIS has no significant relationship with return on investment of SMEs in Nigeria.

H<sub>0</sub>3: Accuracy of AIS has no significant relationship with return on investment of SMEs in Nigeria.

## **2. LITERATURE REVIEW**

### **Concept of Accounting Information Systems (AIS)**

As indicated by Manchilot (2019) Accounting Information System might be described as a PC based electronic system which is used for gathering, storing, processing and imparting financial and accounting data through financial statements with the point of supporting and controlling association in their decision making process. Computers are the centre point of accounting information as they give a stage to the functionality of all information systems. For an accounting information system to be operational, its suitable software application must be on the computer system proposing to be used. Accounting Information System is a mix of individuals, hardware, policies and procedures that work together to gather data and transform it into useful information. AIS is a system that provides individuals with either data or information identifying with an association's activity to support the activities of employees, owners, customers, and different stakeholders in the association's condition by adequately supplying information to approved individuals in an opportune way (Kashif, 2018).

Accounting Information System (AIS) is a structured system that businesses use to store, organize, process, and report financial data in order to assist accountants, financial officers, consultants, auditors, regulators, and tax authorities in making informed choices (Agboola et al., 2020). According to Haitham et al., (2019), AIS is one of the modern Information Systems (ISs) with great potential to influence enterprise performance. AIS refers to collecting, storing and processing of financial and accounting data to help managers make planning, controlling and evaluating decision (Emeka-Nwokeji, 2012). AIS is a technical tool that uses the information technology (IT) or information systems (IS) element to aid in directing the monetary and economic functions of the organizations (Hosain, 2019). Urquia et al (2011) sees AIS as a system used to record the financial transactions of a business or organization. They admitted that this system combine the methodologies controls and accounting technology to track transactions, provide internal and external reporting data, financial statements and trend analysis capabilities. AIS is a computer based system that increases the control and enhances the corporation in an organization (Daw & Susan,2015). Companies are able to adjust their computerized techniques of internal control mechanism,

ensuring the reliability of financial information processing and boast the control measures of effectiveness of the financial information reliability. Daw and Susan (2015) noted that AIS is a superior system that focused on user orientation, which core objective is to collect and record data and information that concern with event that can impact economic of firms. Bamidele et al. (2018) admit that AIS records keeping is the first essential step of accounting system which provides a source of information to owners and managers of SMEs operating in any industry for use in the measurement of financial performance. However, that accounting bases, concepts and principles adopted have to capture the relevant accounting information ensuring reliability in its measurement.

#### **Types of Accounting information system**

Broadly there are two types: Paper based or manual (Traditional) accounting information system and Computer based (automated) Accounting Information systems. It is argued that traditional legacy AISs were mainly paper-based systems and thus seems inappropriate for today's rapidly changing business environment. As a result, there becomes the need to update it to automated systems otherwise, the organizations would be left behind in business processes and sustainability (Amu, 2020). Suffice it to say that AIS has greatly been enhanced with the use of computer technology. Through computer based AIS, the operations and sustainability of SMEs can be enhanced. It is noted that computer technology has increased the use of information in the area of analyzing massive amount of data and in producing accurate and timely reports (Olamide & Adeyemi, 2016). Information and communication technology (ICT) has also occupied a major area in accounting information system. This tool has helped business trade to train, introduce, reinforce, supplement extend skills which affords wide range probabilities for improving competitiveness, new market opportunities as well as specialized information services and more. The networking environment, internet, credit card facilities, point of sales systems, the telephone, stand-alone personal computer (PCs) to mention but few are arrays of primary digital technologies designed to collect, organize, store, process and communicate information within and external to an organization otherwise called SMEs. Computer based AIS would help and facilitate this.

#### **Advantages of proper use of Accounting information system**

According to Amu (2020), advantages of an ideal use of AIS in an association may include: Better adjustment to an evolving situation, better administration of inner business transactions and a high level of competitiveness. In addition, management of personnel, use of accounting information and financing options are areas that need serious and effective management and survival of small business (Okoh & Uzoka, 2012). Accounting information therefore is expected to guide investors and creditor in making good decision on their investment and credit processes to the firms. Furthermore, the primary objective of accounting information is to provide high quality financial reporting. SMEs with high quality information may provide an avenue of making quality decision (International Accounting Standard Board [IASB], 2008). A sound decision will be made depending on the quality of information content, contain on the financial statement as given by the management (Umar, 2018).

Accounting information therefore, represent critical tool for recording, analyzing, monitoring and evaluating the financial condition of companies as well as preparation of documents necessary for tax purposes, providing information support to many other organizational functions thereby making them understand the accuracy of financial situation of the organization and used as the basis of making strategic decisions. Use of AIS by SMEs contributed in several ways in Nigeria economic development include: Source of employment as over 70% of employed Nigerian are in small scale businesses; local raw material utilization as the raw materials used in production are sourced within the country and this helped in reducing the amount of foreign exchange paid to foreigners; the stimulation of indigenous entrepreneurship effectiveness; providing an effective means to reducing rural/urban migration and resources utilization; by contributing to the strengthening of industrial inter-linkages by producing intermediate product for use in large-scale enterprises; retaining competitive advantage over large enterprises by serving disperse local markets and produce various goods with low scale economies(Umanhonlen et al., 2023).

AIS in an organization played an important role in helping organizations adopt and support strategic positions (Rosa & Purfini, 2019). Accounting systems are responsible for analyzing and monitoring the financial condition of companies, preparation of documents necessary for tax purposes, providing information to support the many other organizational functions of production, marketing, human resources management and strategic planning (Harash et al., 2014). Accountants recognize the need for AIS to be able to capture input from non-accounting evidence in order to support input from financial information for improved business decision. Businesses whether in the private or public sector irrespective of its nature or scale requires accounting information to enable such business make an informed financial decision which are necessary for sustainable economic development of such businesses. Build up AIS required to integrate management's requirements for planning, control and decision making. AIS is therefore germane to organization survival (Akanbi, & Adewoye, 2018).

Helps improve organizational effectiveness and efficiency: AIS has a significant effect on organizational effectiveness on study conducted among construction companies. Many organizations adopt the information system to improve their organizational efficiency and increase competitiveness ability whereby increases management commitment and improves information system effectiveness. So, management commitment is engaging in maintaining behaviour that others achieve their goals. The benefits of AIS is seen from its impact on improvement of decision making process, quality of accounting information, performance evaluation, internal controls and facilitating company's transaction. The strategic importance of using AIS showed that the use of accounting information can be linked to the success or failure of a small or medium enterprise. Others are improved quality, cost reduction, increasing the speed of services, informed decisions and more effective information flow (Amu, 2020).

### **Concept of Financial Performance**

According to Aizan (2016) financial performance is a degree to which an organization financial wellbeing over some stretch of time is estimated. As such, it is a financial activity utilized so as to create higher deals, productivity and worth of a business substance for its investors through dealing with its current and non-current resources, financing, value, incomes and costs. Its principle reason for existing is to give financial data to investors and partners in order to empower them settle on all around educated venture choices. It very well may be utilized to assess comparative organizations from a similar industry or to think about ventures in collection. Financial performance is a composite of an association's financial wellbeing, its capacity and readiness to meet its long haul financial commitments and its duty to give benefits in a not so distant (Weber, 2018). Financial performance alludes to the demonstration of performing financial action. In more extensive sense, financial performance alludes to how much financial destinations being or has been cultivated. It is the way toward estimating the consequences of an association's strategies and activities in financial terms.

Financial performance is comprehensively seen as the capacity of the firm to meet its financial targets. Two unmistakable pointers of financial performance are speculator's arrival and bookkeeping returns. The financial specialists return is estimated from the point of view of the investors, while bookkeeping return centre around how the company's procuring react to various administrative strategies (Ofoegbu, 2017). Financial performance analysis is the process of determining the operating and financial characteristics of firm from accounting and financial statements. The goal of financial performance analysis is to determine the efficiency and performance of firm's management, as reflected in the financial records and reports. The analyst attempts to measure the firm's liquidity, profitability and other indicators that the business is conducted in a rational and normal way; ensuring enough returns to the shareholders to maintain at least its market value.

Financial performance is a subjective measure that explains how well a firm can make use of her assets from its primary mode of business and generates revenues. It can also be used as a general measure of a firms overall financial health over a given period of time as well as for a comparative purpose across sectors or industries. There are many ways through which financial performance can be measured, either taken singly or in aggregation. Line items which include revenue operations, operating income or cash

flows from operations can be used. Financial statements can be used to check out for growth rates in revenues, profits or declining debts. The focus of financial analysis is on key figures in the financial statements and the significant relationship that exists between them. The analysis of financial statements is a process of evaluation relationship between component parts of financial statements to obtain a better understanding of the firm's position and performance as industry and economic entity type, managerial and entrepreneurial strategy, competitive environment, human and material resources available, using a system of appropriate performance indicators for this purpose. The exigencies of communication occurred on the growing number of phenomena that marked the global economy in recent decades' internationalization and relocation of business crises and turmoil in financial markets, demand performance measurement to be made in a comprehensive way by financial and non –financial criteria indicators are measures of performance used by management to measure, report and improve performance of the economic entity. The relationship between indicators and management is ensured by the existence of performance measurement systems. Studies to date indicate that economic entities using balanced performance measurement systems as a key management tool registered superior performance compared to entities not using such systems.

### **Financial Performance measures**

Measures of financial performance take a variety of forms. These measures differ from each other on several dimensions, and many issues concern the choice of which particular financial measure to employ. For example, measures may be absolute, return-based, internal, and external, a level for a single period, a mean or a growth rate over several years, or a variability about a mean or a trend. Numerous indicators in measuring firm performance are mainly accounting based measures from financial statements as net profit margin, operating profit margin, return on equity, return on total capital, return on asset, earnings per share, price earnings ratio, sustainable growth rate (Singh & Singh, 2018).), while volatility in returns and stock market returns are also employed as performance measures of firms performance (Abdi & Ali, 2016). Tobin's Q assessment of performance is also explore by some researchers which are combination of market performance and accounting assessment.

### **Return on Investment**

Return on investment analysis compares economic value of the benefits of programs and policies with their associated costs. Also referred to as benefit-cost analysis, this approach to measuring value can be used to assess a range of education, human service, and health programs. The return on investment tests the gain or loss that investment has produced relative to the amount of money invested. Return on investment is commonly expressed as a percentage and is usually used for individual's financial decisions, to evaluate the productivity of a business or to compare the performance of various investments effects (Abdi & Ali, 2016).). The value of return on investment can be positive or negative. A negative return on investment indicates an unprofitable project. When two investment projects have positive but different return on investment, at equal risk, the project with higher return on investment will be privileged. If two investment projects have positive and about the same value return on investment, the project with lower risk will be privileged. If the return on investment is bigger, the investment situation is better. The aim of the company's manager is to ensure maximizing this indicator for a long period, thus increasing the enterprise and shareholder remuneration effects.

Return on investment cannot be controlled from a single department of the company. To increase return on investment managers should either increase the numerator, meaning to increase revenues and reduce costs or lessen the denominator, meaning to reduce assets. Any of these actions can have both positive and negative effects. Thus, some decisions aiming to reduce return on investment can improve the economic condition of the company, as some decisions aiming to increase return on investment may result in an unsatisfactory activity.

Return on investment is calculated as the ratio between operating profit obtained after the action of investment and the total amount invested (or the total investment costs). The result being a percentage the relation obtained is multiplied by 100. The calculation formula is:

$$\text{Return on Investment} = \frac{\text{Revenues of Investment} - \text{Amount Invested}}{\text{Amount Invested}} \times 100$$

In other words,

$$\text{Return on Investment} = \frac{\text{Profit (After Investment)}}{\text{Invested Capital}} \times 100$$

It is a formula that can be applied to all types of investments. Return on investment is used by investors to select an investment project of several possible. As well it can be used after completion of the investment, to measure its profitability. Return on investment is an indicator frequently used in performance analysis and decision making. Investments are means to secure the company's development on medium and long term. The term of investments has been defined by many authors over time (Ashraf et al., 2017). Note that investments are considered „resources deployed in the hope of achieving benefits during a long period of time or “money or other resources expended in the hope that in the future they will bring higher amounts of money or other benefits will occur.

In an investment program are established the objectives, actions and means to achieve the objectives, performance, and how to combine and use the resources. Financial effects of the investment will be felt for several years. The success of an investment project requires achieving its objectives. The objectives of an investment are multiple: increasing profit, customer satisfaction, increasing the share market etc. An important role in assessing management performance is the profits earned on the asset used. By comparing profit with assets we can appreciate the extent to which profits generate an adequate return on invested capital. Among the most commonly used indicators in measuring the return on invested capital is Return On Investment (ROI).

Aziz and Abbas (2019) opined that for the investment projects in which their operation is spread over several years, updating figures is mandatory. Also, return on investment cannot be used to compare investment projects having different economic durations. Regarding the measurement of the volume of invested capital considered in calculating ROI, various alternatives are possible: only the own funds are retained; own funds and borrowed funds are considered; the invested capital is defined based on fixed assets used by the profit centre, including the capital of the investment centre assigned to finance current operating activities (working capital). Another limitation of return on investment indicator is the focus on the financial side of investment. Related benefits are ignored: customer satisfaction, employee motivation, improving the image of the market etc.

### **Concept of Small and Medium Enterprises (SMEs)**

SMEs as defined by the European Commission (2003) is a business organisation having less than 250 persons employed; having annual turnover of up to EUR 50 million or a balance sheet total of not more than EUR 43 million. A breakdown by the commission revealed the number of employees each class of business should have. These are as follows: i). Micro Enterprises have less than 10 persons employed; ii). Small Enterprises have 10-49 persons employed; iii). Medium sized enterprises have 50-249 persons employed; iv). Large Enterprises have 250 or more persons employed (Emmanuel & Ebri, 2021). Furthermore, as noted by Onomelenhon et al (2023), in Nigeria, SMEs is defined and classified by the Small and Medium Sized Development Agency of Nigeria (SMEDAN) as a micro enterprise of a business with less than 10 People with an annual turnover of less than N5,000,000. 00; a small enterprise as a business with 10 – 49 people with an annual turnover of N5 to N49, 000,000.00; while a medium enterprise as a business with 50 – 199 people with an annual turnover of N50 to N499,000.00.

On the other hand, Department of Business, Enterprise and Regulatory Reform Agency (BERR, 2009) classifies them as Micro Firm: 0-9 employees; Small Firm: 0-49 employees; while Medium Firm: 50-249 employees; and Large Firm over 250 employees respectively. The important roles of SMEs can best be sustained through the implementation of fundamental financial and accounting practices. Apparently, accounting information is used to assess the profitability of alternative courses of action, measure



performance and evaluate the position of enterprises in term of profitability, liquidity, activity and leverage (Abusomwan et al.,2016), thereby used to improve SMEs performance. In OECD countries, SMEs account for over 95% of firms, 60-70% of employment and 55% of Gross Domestic Products (GDP) (OECD, 2006). OECD further reports that in developing countries, SMEs represents more than 90% of all firms and such firms contribute significantly to GDP. There are various ways through which SMEs contribute to the economy. In South Africa, small businesses are categorized into four, namely; micro enterprises, very small enterprises, small enterprises and medium enterprise (Smith & Watkins, 2012). The authors further put it that the differentiating factor between these categories is the number of employees. However, UNEP (2003), points out that advancement in Information and Communication Technology (ICT) could make SMEs definitions that take number of employees into account less relevant. Ojukwu (2006) posits that SMEs stimulate indigenous entrepreneurship, provide employment to a greater number of people, mobilize and utilize domestic savings and generate inputs for large-scale production. According to Aganga cited in Adeloje (2012), Nigeria has an estimated population of seventeen million SMEs, representing over 80% of the total number of firms in Nigeria and employ over 31 million Nigerians or about 75% of the total workforce. Aganga further noted that SME's contribution to the GDP in Nigeria is relatively low as a result of the major constraints in the operating environment (Adeloje, 2012). Such constraints include insecurity, corruption and poor infrastructure . These in addition to other internal and external business challenges further expand the difficulty of SMEs in the performance of their economic roles. Similarly, Suh (2010) posits that the SMEs sector is worst affected by the economic environment and is the first to be hit by any external shock. This implies that SMEs are weak in terms of business plan, management structure and in decision making. In addition, SMEs are characterized by inability to absorb most uncertainties and risks confronting business organisations. This has direct impact on their performance and therefore weakens their ability to achieve economic sustainability (Yusuf & Dansu, 2013)

## **2.2 Theoretical Framework**

### **Resource-based view Theory**

The resource-based view theory was propounded by Barney in 1991. According to Barney(1991) the resource-based view avers that the source of sustainable advantage derives from doing things in a superior manner; by developing superior capabilities and resources. The resource-based view proffers a means of evaluating potential factors that can be deployed to confer a competitive edge for business organizations. A key insight arising from the resource-based view is that not all resources are of equal importance, nor do they possess the potential to become a source of sustainable competitive advantage. The resource-based theory is divided into three levels; capability, competence and skills. (Cragg et al., 2011). Capability refers to how firms manage their resources; competence, refers to how well those resources are managed, and skills are associated with ranges of skills such as technical, managerial and general management skills. Accounting information systems also form part of resources available to firms. Inclining the resource-based view theory with accounting information systems and performance will imply that firms properly and adequately manage accounting information systems to utilize its capability competence and skill sets for improved organizational performance.

The resource management based view theory has faced several criticisms. One of such criticism is that the theory lacks substantial managerial implications or operational validity (Priem & Butler, 2001). It seems to tell managers to develop and obtain valuable, rare, inimitable, and non-substitutable resources and develop an appropriate organization, but it is silent on how this should be done (Connor, 2002; Miller, 2003). (Lado et al., 2006) also argues the resource-based view theory suffers a tension between descriptive and prescriptive theorizing. However, Barney and Clark (2007) posits that the resource-based view theory is a theory aspiring to explain the sustained competitive advantage of some firms over others and, as such, was never intended to provide managerial prescriptions. In concurrence with this assertion, any explanations the resource-based view theory might provide may not be indicative, yet still of value to managers, so there may be no reason to oblige the resource-based view theory to generate theoretically

compelling prescriptions. Inclining this theory with Accounting Information Systems and Firm's Financial Performance will imply that firms properly and adequately manage Accounting Information Systems to utilize its capability, competence and skills sets for improved organizational performance.

### **2.3 Empirical Review.**

Thomas and Ben – Kinanee (2023), study focused on accounting information systems and business sustainability: The case of SMES in Nigeria. The main aim of the study was to critically examine how accounting information systems deployment could enhance the sustainability of SMEs in Nigeria given the trend of winding up of SMEs in Nigeria in the midst of harsh business environment. The study specifically examined the features of Accounting Information Systems; examined how Accounting Information systems can help SMEs achieve sustainability of operations; and identify the challenges towards implementation of accounting information systems by SMEs in Nigeria. The paper adopts Meta-analysis methodology. The study reviewed and anchored on Knowledge Based Theory and Contingency Theory. Past empirical literature reviewed showed a gap as they left out accounting information systems deployment for sustainability of SMEs. The highlighted the features of accounting information system to include four (4) sub systems and six (6) components. The sub systems are i) Transaction processing system (TPS), ii) General ledger/financial reporting system (GLRS), iii) Fixed resource system (FRS) and iv) management reporting system (MRS), the components include i) Individual, ii) Data, iii) procedure, iv) software, v) information technology infrastructure, vi) internal control system. Developing of skills for survival; increase in profitability, sales, market share and growth are some of the benefits of using AIS as identified. The study also identified some of the challenges that have hampered AIS implementation in SMEs as low knowledge of accounting information system and usage; lack of financial resources needed to implement AIS; incompetent personnel; obsolesce of already existing equipment among others. The study concludes that while SMEs have the ability to contribute more percentage to employment growth rate, nation GDP, SMEs prospects and sustainability, proper accounting information systems can facilitate this achievement. The study recommended among others that there should be more awareness creation by the relevant authorities on the importance and need for accounting information implementation and adoption of technology for business survival for SMEs. Government and investors should make more funding available to SMEs, this can be in form of grants and interest free loans; and regular capacity building and training to be up to date in the use of ICT equipment and software for those already employing it for their operations.

Ironkwe and Nwaiwu (2018) examines the effect of Accounting Information system on financial and non-financial measures of companies in Nigeria. Qualitative and quantitative data of 16 companies were obtained from researchers. Data were obtained from questionnaires and the Nigerian stock exchange (NSE) from 2011 to 2014. Data collected were analysed using multiple linear regression techniques with the aid of statistical package for social science (SPSS). The empirical investigation found that Accounting Information System exert significant positive effect on financial and non-financial measures indicators of companies in Nigeria.

Rehab (2018) investigates the impact of Accounting Information Systems on organizational performance. The study collected data through 137 questionnaires from Small and Medium Enterprises (SMEs) in Saudi Arabia and employed smart partial least squares to analyse the data and to test the study hypotheses. Findings revealed that using an AIS has a significant impact on organizational performance generally and on all its dimensions including cost reduction, improving quality and effective decision making.

Borhan and Bader (2018) examines the impact of Accounting Information System on the profitability of selected commercial banks in Jordan. The study adopted a survey design and data were collected through self-administered questionnaires from 206 employees in Jordanian banks. The study analysed the obtained data using the linear regression analysis. Findings highlights that there is a significant impact of Accounting Information System on the profitability of banks under study.

Akanbi and Adewoye (2018) examines the effects of Accounting Information System adoption on the financial performance of commercial banks in Nigeria. The study employed a descriptive survey research design where data were obtained from questionnaires administered to 80 respondents randomly of 16 commercial banks. The study also employed secondary data from the financial statements of the sampled banks. Data were collected on return on capital equity (ROCE), return on total asset (ROTA), net operating profit (NOP) and gross profit margin (GPM) for a 10-year period ranging from 2007-2017. Linear Regression was employed to test the significant effect of AIS adoption on bank performance. Findings revealed that commercial banks in Nigeria adopted and use AIS in providing their services to their customers and the level of usage is relatively high. The study concluded that AIS adoption has a positive significant with all the performance indicators (ROCE, ROTA, GPM and NOP).

Raed (2017) investigates the impact of Accounting Information Systems (AIS) on banks success in Jordan. The study employs a survey research design. The study obtained data from 112 questionnaires administered to employees of Jordanian banks. Correlations and multiple regressions were applied to answer for the study hypotheses. Findings revealed that Accounting Information Systems has a significant effect on banks success.

Alnajjar (2017) investigates the Impact of Accounting Information Systems on performance management and organizational performance. The study employed a survey research design and analyses the data collected from 74 SMEs. Data obtained for the study were analysed using regression analysis. Findings from the study revealed that accounting managers' knowledge and top management support significantly impact on the accounting information systems in an organization and, Accounting Information Systems also significantly impact the performance management and organisational performance of that organisation.

### 3. METHODOLOGY

The survey method was adopted as the research design for the study. The target population for this study consist of three SMEs situated in Obio Akpor LGA, Rivers State, Nigeria. The sample size of the population consisted of one hundred and twenty (120) staff of three different SMEs in Obio Akpor Local Government Area. Convenience sampling technique was adopted for the study. The use of this sampling technique was to obtain data from population member that are conveniently available to participate in the study (Saunders et al., 2012). The study employed structured questionnaire as the research instrument to collect data. 120 copies of questionnaire were used for data gathering. The questionnaire was drafted using the five scale Likert system for questionnaire (where SD = Strongly Disagree, D = Disagree, U = Undecided, A = Agree and SA = Strongly Agree). The questionnaire was divided into two sections which are section A and B where section A is personal information and B are questions to be answered by the respondents. Data collected were presented using simple percentage and table while Spearman rank order correlation analysis with the aid of SPSS statistical tool was used to test the hypothesis formulated to achieve the objective of the study

### 4. FINDINGS AND DISCUSSION

#### 4.1 Presentation of data

**Table 4.1.1: Name of SMEs**

Name of SME	Number of questionnaires	Returns of questionnaires	Percentage Returns of questionnaires(%)
Cash Craft Business Limited	40	36	90
Delta Plastic Limited	40	32	80
Success Link Limited	40	40	100
<b>Total</b>	120	108	90

Source: Researcher's Survey (2024)

From the above table, it could be seen that 120 questionnaires were administered to three (3) SMEs and 108 of the questionnaire were returned. The 90% return rate could be attributed to frequent visits made to the office of the respondent. The respondents were asked to indicate if AIS has any impact on Financial Performance of their SME.

**4.2 Hypothesis Testing**

In this section, the hypothesis stated in chapter one is tested at 5% level of significance using the non-parametric test (Spearman’s Rank Correlation Analysis). This section deals with the testing of the various hypotheses using Spearman’s Rank correlation (rho). Salkind (2010), gives the following parameters as the benchmark for interpreting correlation coefficient (r).

- ±0.80 - 1.00 Very Strong relationships
- ±0.60 - 0.79 Strong relationships;
- ±0.40 - 0.59 Moderate relationships;
- ±0.20 - 0.39 Weak relationship; and
- ±0.01 - 0.19 Very Weak or no relationship

The positive sign (+) in the value (r) implies a direct positive relationship while a negative sign (-) indicates an inverse relationship.

**Decision Rule:** Accept null hypothesis if Sign F is greater (2 tailed) than 5% (0.05) (Sign F>0.05), otherwise, reject the null hypothesis.

**Hypothesis one**

**HO<sub>1</sub>:** Timeliness of AIS has no significant impact on return on investment of SMEs in Nigeria.

**Table 4.22: Spearman’s Correlations result for Hypothesis one**

			AIS	ROI
Spearman's rho	AIS	Correlation Coefficient	1.000	.952**
		Sig. (2-tailed)	.	.000
		N	108	108
	ROI	Correlation Coefficient	.952**	1.000
		Sig. (2-tailed)	.000	.
		N	108	108

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: (SPSS output of Data, 2024)

From the table above, the positive and very large value of rho (0.952\*\*) indicates that there is a very strong rank correlation between timeliness of Accounting Information System and Return on Asset of SMEs in Rivers State, Nigeria. and correlation is significant at 0.01 level. Since the p – value (= 0.000) is less than the level of significance (alpha) (0.05), we therefore reject the null hypothesis and conclude that: Timeliness of AIS has significant impact on financial performance of SMEs in Nigeria.

**Hypothesis Two**

**HO<sub>2</sub>:** Feedback from AIS has no significant impact on return on investment of SMEs in Rivers State, Nigeria.

**Table 4.18: Spearman’s Correlations result for Hypothesis two**

			FAIS	ROI
Spearman's rho	FAIS	Correlation Coefficient	1.000	.868**
		Sig. (2-tailed)	.	.000
		N	108	108
	ROI	Correlation Coefficient	.868**	1.000
		Sig. (2-tailed)	.000	.
		N	108	108

\*\* . Correlation is significant at the 0.01 level (2-tailed).

From the table above, the positive and very large value of rho (0.868\*\*) indicates that there is a very strong rank correlation between feedback from AIS and return on investment of SMEs in Rivers State, Nigeria, and correlation is significant at 0.01 level. Since the p – value (= 0.000) is less than the level of significance (alpha) (0.05), we therefore reject the null hypothesis and conclude that: Feedback from AIS has significant impact on financial performance of SMEs in Rivers State, Nigeria.

**Hypothesis Three**

**HO<sub>3</sub>:** Accuracy of AIS has no significant impact on return on investment of SMEs in Rivers State, Nigeria.

**Table 4.19: Spearman’s Correlations result for Hypothesis three**

			AAIS	ROI
Spearman's rho	AAIS	Correlation Coefficient	1.000	.866**
		Sig. (2-tailed)	.	.000
		N	108	108
	ROI	Correlation Coefficient	.866**	1.000
		Sig. (2-tailed)	.000	.
		N	108	108

\*\* . Correlation is significant at the 0.01 level (2-tailed).

From the table above, the positive and very large value of rho (0.866\*\*) indicates that there is a very strong rank correlation between accuracy of Accounting Information System, return on investment of SMEs in Rivers State, and correlation is significant at 0.01 level. Since the p – value (= 0.000) is less than the level of significance (alpha) (0.05), we therefore reject the null hypothesis and conclude that: Accuracy of AIS has significant impact on financial performance of SMEs in Nigeria.

**4.3. DISCUSSION OF FINDINGS**

Looking at the hypotheses that are tested to ascertain the impact of accounting information system of financial performance measure of return on Investment they should positive, very strong and significant relationships. For hypothesis one which says that timeliness of AIS has no significant impact on return on investment of SMEs in Nigeria using the value of rho (0.952\*\*), and P- level of 0.000, the alternate was accepted as timeliness of AIS has significant impact on financial performance of SMEs in Nigeria. The result shows that 95.2% of the changes in financial performance in terms of return on investment is accounted for by timeliness of accounting information system. In the same vein, the research hypothesis two states feedback from AIS has no significant impact on return on investment of SMEs in Rivers State, Nigeria, as evident in the statistical results rho (0.868\*\*), a positive, very strong and significant relationship was revealed to exist between feedback from AIS and return on investment in Rivers State, Nigeria. The result shows that 86.8% of the changes in return on investment of SMEs in Rivers State, Nigeria.

The research hypothesis three states that Accuracy of AIS has no significant impact on return on investment of SMEs in Rivers State, Nigeria. Similarly, as evident in the statistical testing of hypothesis three, a very strong and positive relationship was revealed to exist between accuracy of AIS and return on Investment in Rivers State, and correlation is significant at 0.01 level, this is evident in the correlation (rho) value of 0.866\*\* (86.6%). The null hypothesis three is therefore rejected and the alternative hypothesis accepted. This shows that the 86.6% of the changes of return on investment is accounted for by accuracy of accounting information system.

Furthermore, looking at the spearman’s rank correlation values as well, Timeliness of Accounting Information System and Return on Investment is ranked 1<sup>st</sup> in the order of the impacts as its value is higher than that of other variables studied. Feedback from AIS ranked 2<sup>nd</sup> while Accuracy of Accounting

information system ranked 3<sup>rd</sup>. In summary, hypothesis one revealed that timeliness of AIS has significant impact on Financial return on investment of SMEs in Nigeria. This implies that AIS that is produced on a timely basis go a long way in enhancing the Financial Performance of SMEs in Nigeria. This finding consistent with the studies of Beaver and Demski (2018), Bohan and Bader (2018). However, it was inconsistent with the study of Aizan (2016).

Hypothesis two revealed that AIS has significant impact on return on investment of SMEs in Nigeria. This implies that AIS that allows for Feedback enhance Financial Performance of SMEs in Nigeria. This finding is in tandem with the study of Martins (2018); Alnajjar (2017). It was however, inconsistent with the study of Raed (2017). Hypothesis three revealed that AIS has significant impact on return on investment. This implies that the accuracy of AIS enhance financial performance of SMEs in Nigeria. This finding is in tandem with the studies of Akanbi and Adewoye (2018); Mehdi, Mahmoud, Mostafa and Ebadollah (2015). It was inconsistent with the study of Rommney and Stenbart (2016). The findings of the study have policy implications to SMEs operating investors and to the government because it enables the various stakeholders in ascertaining the need for the institution of AIS in SMEs since it goes a long way in enhancing their financial performance.

## **5. CONCLUSION AND RECOMMENDATIONS**

It is good to note that accounting records and report are necessary for provision of relevant information for decision making purposes. It means therefore that proper decision making mechanism which leads to increased efficiency, reduction of cost and improved performance is hinged on readily available of up to date concise and accurate records and report. Similarly, when decision makers and staff are well versed with accounting and financial skills then reliability of their decisions will be enhanced. The following were revealed from the study;

1. Timeliness of AIS has significant relationship with financial performance of SMEs in Rivers State, Nigeria;
2. Feedback from AIS has significant relationship with financial performance of SMEs in Rivers state, Nigeria;
3. Accuracy of AIS has significant relationship with financial performance of SMEs in Rivers state, Nigeria;

Conclusively, the study revealed that there is a strong positive relationship between Accounting Information System (quality measures such as records and report management, the extent of knowledge and usage, the nature of the AIS in use and extent of regulation in use) and Financial Performance. Thus, the study concludes that AIS positively impact on the financial performance of SMEs in Obio Akpor Local Government, Rivers State, Nigeria. Conclusively, AIS coordinates the performance of SMEs, as most of them rely on accounting information for decision making that affect their performance and operations. The study therefore suggests the following recommendations:

1. Management of SMEs should deplore sound accounting practices to their operations. Since sophisticated accounting system may be out of reach by SMEs operators, resource sharing approach could be adopted by SMEs within the same locality as a cost-reduction device.
2. There is need to encourage the workers on the regulation of any nature in all businesses. This not only to bring sanity but to set standard and ensure provision of certain informational requirements which are of financial report format to encourage most business operators to be aware of basic reporting skills. This can be made on line in nature of such it leads to more adoption of computerised systems. Most respondents that indicated that their businesses were well regulated reportedly had a well computerized accounting system and further were much knowledgeable on the key accounting information aspects and even had better returns. This could be due to the unique informational requirements of the regulator.
3. It is important to note that if filing tax returns, returns with registrar of the companies, societies etc., could incorporate the segment that requires the provision of financial accounts in a given

prescribed format and in an online mode then most firms would be encouraged to adopt computerised accounting system.

### **Limitation of Study**

The following limitations will prevent the findings of this study to be generalised:

1. Restrictions of documents by organizations: Most of the SMEs don't feel secured in giving out information about their organizations to students for research purpose. By so doing, it made the researcher to feel reluctant.
2. Research Instrument: Questionnaire was the source of data collection. Responses from questionnaires are highly subjective.
3. Inadequate Library Materials: This impeded the efficiency of the researcher in sourcing for the relevant materials and literature. Also, the researcher simultaneously engaged in this study with other academic work.

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