



IMPACT OF ACCOUNTING INFORMATION SYSTEMS ON ORGANIZATIONAL EFFECTIVENESS OF AUTOMOBILE COMPANIES IN NIGERIA

*Olowe, Folake Tinuola

Department of Accountancy

Osun State Polytechnic, Iree.

+2348034603158

Email: relevant4ever@gmail.com

Oke, Adesoji Aderemi

Accounting & Finance, Dept

Fountain University, Osogbo

+2348035016371

okeadesoji@yahoo.com

Togun, Olaroyeke Ranti

Dept of Accountancy

Osun State Polytechnic, Iree

+2438033955851

Email: royeketogun@yahoo.com

- Corresponding Author

Abstract

The objective of this study is to determine the impact of accounting information systems on the effectiveness of automobile companies in Nigeria. The research design of the study is descriptive research method and secondary source was applied in data collection and analysis. The findings of this study indicate that Accounting Information Systems are an important mechanism for organizations' effective management, decision-making and controlling activities. The results are consistent with empirical reviews which indicated that there exist a relationship between Accounting Information Systems and organizational performance. Accounting Information Systems are an effective decision-making tool for controlling and coordinating the activities of an organization. The study concluded that Accounting Information Systems are critical to the production of quality accounting information on a timely basis and the communication of that information to the decision makers. In other words, empirical findings indicated that accounting information systems have a greater impact on the organizational effectiveness of automobile companies in Nigeria.

Keywords: Automobile, Accounting Information Systems, effective Organisation

INTRODUCTION

Automotive industry in Nigeria dates back to the 1950s and consists of the production of passenger cars and commercial trucks. Early production was led by the assembly line of Bedford TJ trucks made by United Africa Company's subsidiary, Federated Motors Industries and SCOA's production of Peugeot 404 pickup trucks. Significant development began in the 1970s, during a period of oil boom, the Federal Government of Nigeria signed joint venture

partnerships with foreign car manufacturers to assemble vehicles and provide technical assistance towards vertical integration within the local Industry. These foreign brands went on to dominate the industry from the middle of the 1970s to the end of the 1980s. The passenger vehicles brands were Peugeot Nigeria Ltd and Volkswagen. The commercial vehicles manufacturers, Leyland, Anambra Motor Manufacturing, and Steyr competed with Bedford truck for dominance. The companies simply assembled kits and completely knocked down parts imported from abroad. In the marketplace, demand was largely dictated by the government's budgetary concerns. Towards the end of the 1980s the industry was negatively affected by a downturn in the economy, government's inconsistency and the higher cost of locally manufactured cars compared to imported counterparts. By 2000, used foreign cars dominated car sales in the country, and the rise of these affordable used cars negatively impacted the development of backward integration in the industry.

Before the Nigerian Civil War, automobile production was in the form of assemblage of partially knocked down bits. Federated Motor Industries, a branch of UAC produced Bedford TJ trucks and SCOA assembled Peugeot 404 pick-up trucks. The cab, chassis, axles and wheels were imported separately to reduce the total landing cost of importation.

In 1969, hoping to promote technology transfer, industrialization and reap gains from backward integration, the Nigerian government published a request for proposal for the establishment of automotive assembly plants. About 20 car manufacturers responded but ultimately selection was influenced by the demand of the brands in Nigeria. To set up passenger vehicles assembly plants, the country went into negotiations with Peugeot of France and Volkswagen AG of Germany, the government also had in mind a medium term outlook of the provision of technical assistance to develop local content inputs with the intention that by 1990, the locally manufactured vehicles will have 100% input sourced locally. Ndiaku, (1982) negotiations also were initiated with Steyr of Austria, Leyland of Great Britain, Daimler-Benz of Germany and Fiat of Italy for commercial truck production. The government initiated moves to protect the local industry by increasing customs duties on fully built cars and trucks shipped into the country.

The established dealers face intense competition from imported second-hand vehicles, mainly from Japan and United Arab Emirates. These imports now account for about 70% of the market. The last decade witnessed a significant decline in the number of new vehicles sold in the country. There has been a steady recovery in the last four years, but the numbers achieved still fall far short of the numbers recorded a decade ago. In 2004, the leading motor vehicle companies recorded sales of 9,979 units. Although 27% better than the previous year, this is still well below the levels achieved in the early 1990's. The slump in the volume of new cars sold is attributable the increased competition from second hand vehicles and the depressed economy. Pressures in the highly competitive automotive manufacturing sector increase and over-capacity, particularly in vehicle assembly, mean that most suppliers face unrelenting price pressure.

Automotive industry in Nigeria dates back to the 1950s and consists of the production of passenger cars and commercial trucks. Early production was led by the assembly line of Bedford TJ trucks made by United Africa Company's subsidiary, Federated Motors Industries and SCOA's production of Peugeot 404 pickup trucks. Significant development began in the 1970s, during a period of oil boom, the Federal Government of Nigeria signed joint venture

partnerships with foreign car manufacturers to assemble vehicles and provide technical assistance towards vertical integration within the local industry. These foreign brands went on to dominate the industry from the middle of the 1970s to the end of the 1980s. The passenger vehicles brands were Peugeot Nigeria Ltd and Volkswagen. The commercial vehicles manufacturers, Leyland, Anambra Motor Manufacturing, and Steyr competed with Bedford truck for dominance. The companies simply assembled kits and completely knocked down parts imported from abroad. In the marketplace, demand was largely dictated by the government's budgetary concerns. Towards the end of the 1980s the industry was negatively affected by a downturn in the economy, government's inconsistency and the higher cost of locally manufactured cars compared to imported counterparts. By 2000, used foreign cars dominated car sales in the country, and the rise of these affordable used cars negatively impacted the development of backward integration in the industry. Recently, a local brand, Innoson has opened an assembly plant in the country. Some of the plants had been privatized, VON was sold to Stallion Group and Leyland was sold to Busan. Production has been scaled down from the heights of the 1980s.

Before the Nigerian Civil War, automobile production was in the form of assemblage of partially knocked down bits. Federated Motor Industries, a branch of UAC produced Bedford TJ trucks and SCOA assembled Peugeot 404 pick up trucks. The cab, chassis, axles and wheels were imported separately to reduce the total landing cost of importation.

In 1972, the government signed a contract with popular brand Volkswagen of Germany to establish an assembly plant in the country. Equity interest was divided as: Volkswagen AG (40%), German financial institutions (11%), Nigerian government (35%), Lagos State (4%) and Nigerian distributors (10%). The plant was situated along the newly constructed Lagos-Badagry expressway and production began in 1975. The cars were assembled from completely knocked down parts imported from Germany and supplied by Volkswagen. The plant produced the beetle (1300cc, 1500cc, 1600cc), Audi 100 Audi (100 cd), Golf, Kombi bus, Jetta and Passat. The company's vehicle was popular among the middle class in the country (Cheeseright,1982).

The other major passenger vehicle manufacturer is Peugeot Automobile of Nigeria also known as PAN. Like Volkswagen, PAN began production in 1975 with inputs shipped in bits and pieces from abroad. The equity distribution was Peugeot Citroen (40%), Nigerian government (35%), Kaduna State (10%) and Nigerian Industrial Development Bank (5%). At onset, the cars were priced affordably and it became a popular car among the middle class. Production rose from 2,259 in 1975 to 35,000 in 1979 to 48,235 in 1980 Okeke, (1996). The company started with the 504 model and later introduced the 505 in 1980. But when the economy went through a downturn, partly caused by drop in oil prices, newly introduced fiscal policy such as foreign exchange and import controls made it hard for manufacturers to source foreign currency making the cost of production Bangura,(1987). "The Recession and Workers' Struggles in the Vehicle Assembly Plants: Steyr-Nigeria still maintains a production line assembling car but at a reduced rate from its peak.

In the 1970s, the Nigerian government signed agreements with four foreign manufacturers to invest in assembly plants within the country. One of the agreements berthed Anambra Auto Manufacturing Company also known as ANAMCO, a partnership between the Nigerian federal government and Daimler Benz for the production of trucks. The assembly plant located in

Enugu started production in 1980. The company produced MB trucks, ambulances and refuse disposal trucks with an annual capacity of 7,500.[4] Another project was Leyland Nigeria Ltd, a joint venture with Leyland of U.K., the plant is located in Ibadan and at its height it produced trucks and vans for the military, customs, police and the general populace. The Leyland plant also had the ability to produce four wheel drive vehicles. The plant assembled a mixture of five vehicles including the Mitsubishi Canter, Land Rover, Range Rover, The Landmaster and the Albion.

Commercial vehicle manufacturers wanted government protection from importation to ensure a vibrant car market that will be worthy of sustained investment and that will be able to develop a local supplier industry. However, by 1981, reduction in crude oil prices from the heights of the 1970s led to foreign exchange and import controls and rationing that negatively impacted car production and caused production delays. The assembly plants were capital intensive and depended on importation of parts from abroad but the demand for knocked down parts placed strain on foreign currency market. The government was not generous in providing import licenses to the companies and sometimes shipments were delayed at the ports until proper licenses were obtained. By 1985, all the commercial truck plants were producing below 30% of their capacity and sustaining losses. Towards the end of the 1980s, the government initiated market liberalization measures that allowed more imported cars to compete with locally made vehicles. Volkswagen and PAN increased the cost of their vehicles as a result of a depreciating naira and reduced government subsidy. Volkswagen shifted market focus to selling Kombi buses for commercial transport and corporate cars (Bangura,1987).

The plants were capital intensive and barely generated profits, equity partners like the government were happy that the plant was running and for the foreign manufacturers, profits came largely from the supply of CKD. Eight years after the plants were opened, the local content target was never met and Ndiaku (1982) the plants still imported bits and pieces from abroad. Lack of collaboration between manufacturers and local distributors made difficult the production of parts to meet the manufacturers specifications and life span of parts. Infrastructural deficits such as unstable electric supply increased the cost of producing vehicles and car parts made the locally manufactured vehicles more expensive than its imported counterparts. (Agha,2013)

As soon as production began, demand for vehicles and trucks was heavily influenced by government spending. During a budgetary period when the government did not patronize the manufacturers, production plans were going to be negatively affected. The worst affected by government inconsistency and drop in oil prices were the commercial vehicle plants. While market demand was 36,000 in 1977 by 1981 it had declined to 14,440. Leyland's production was greatly influenced by government spending. Each year, the company followed the expenditure plans of Nigerian customs, police and its military to create a demand influenced production plan. It also depended on Leyland of U.K. for bits and pieces for production. However, in some cases, government agencies began importing their own vans, this made Leyland scale down its operations, and finally the manufacturer stopped sending bits and pieces when production was scaled down and government officials came abroad to negotiate purchase in Leyland U.K. instead of the local manufacturer (Okeke, 1996).

Since the beginning of democratic governance in 1999, the government has been selling its equity stake in the assembly plants. Volkswagen was sold to the Stallion Group, PAN's stake

was bought by ASD Motors. PAN, Stallion and local brand Innoson are the major local assembly plants in the country but Stallion mostly assembles partially knocked down parts. Innoson was commissioned in 2010 with an installed capacity of 10,000 vehicles a year, in 2015, the planned production target was 6,000 vehicles. In 2009, PAN started a new production line switching from 406 to 307 models. The paper is of key importance to the selected automobile companies as well as other firms in the same sector in terms of determining the benefits accruing due to the integration of accounting information systems in their operations. This enabled automotive firms in gauging the model in terms of enhancing organizational effectiveness. The study is useful to other researchers interested in the problem under investigation as the study has laid a platform on which further studies related to the subject can be undertaken. The study would provide a theoretical basis about accounting information system successful adoption dimension to firms. It would provide practical guidance for accounting information systems implementation in small and medium business and it would also provide empirical and practical contributions for organization in effectively applying accounting information system in their operations. Accounting information systems provide information about the financial resources, obligations, and activities of an enterprise that is intended for use primarily by external decision makers – investors and creditors. This study provides useful information in making investment and credit decisions.

Accounting Information Systems

Accounting Information Systems (AIS) are a tool which, when incorporated into the field of Information and Technology systems, are designed to help in the management and control of topics related to organization's economic-financial area. But the stunning advance in technology has opened up the possibility of generating and using accounting information from a strategic viewpoint (El Louadi, 1998). Accounting Information System (AIS) is vital to all organizations (Borthick and Clark, 1990; Wilkinson et al., 2000) and perhaps, each organization either profit or non-profit oriented need to maintain the AISs. To better understand the term 'Accounting Information System', the three words that constitute AIS would be elaborated separately. Firstly, accounting could be identified into three components, namely information system, "language of business" and source of financial information. Secondly, information is a valuable data processing that provides a basis for making decisions and fulfilling legal obligation. Finally, system is an integrated entity, where the framework is focused on a set of objectives (Watts, 1999). Several, studies have analyzed the impact of AIS in strategic management, examining the attributes of AIS under different strategic priorities. It has also analyse effect on performance of the interaction between certain types of strategies and different design of AIS (e.g. different techniques and information). The appropriate design of AIS supports business strategies in ways that increase the organizational performance (Chenhall, 2003). Increasing AIS investment will be the leverage for achieving a stronger, more flexible corporate culture to face persistent changes in the environment. Innovation is the incentive with which a virtuous circle will be put in place, leading to better firm performance and a reduction in the financial and organizational obstacles, while making it possible to access capital markets. AIS are systems used to record the financial transactions of a business or organization. AIS combines the methodologies, controls and accounting techniques with the technology of the IT industry to track transactions, provide internal reporting data, external reporting data, financial statements, and trend analysis capabilities to affect on organizational performance (Gul, 1991).

In managing an organization and implementing an internal control system the impact of accounting information system (AIS) is crucial. An important question in the field of accounting and management decision-making concerns that fit of AIS with organizational requirements for information communication and control (Nicolaou, 2000). Benefits of accounting information system can be evaluated by its impacts on improvement of decision-making process, quality of accounting information, performance evaluation, internal controls and facilitating company's transactions (Bolon, 1998).

Organizational Effectiveness

Organizational effectiveness is the concept of how effective an organization is in achieving its goals. Every employee in a company contributes to organizational effectiveness. Taking into account skills, experience, motivation and rank, some employees play a bigger role than others. These are the people who contribute to the development of organization mainly with their knowledge. Organizational effectiveness was succinctly defined by Daft (1983) as "the degree to which an organization realized its goals". However, Mondy, (1990) defined it aptly as "the degree to which an organization produce the intended output" As Daft rightly argued. Organizations pursue multiple goals, and such goals must be achieved in the face of competition limited resources, and disagreement among interest groups. Oguntimehin (2001) submitted that organizational effectiveness is the ability to produce desire results.

There are many ways to measure the effectiveness of an organization, which include different criteria such as productivity, profits, growth, turnover, stability and cohesion. Rational perspectives focus on the achievement of previously set goals and on output variables such as quality, productivity and efficiency. Natural system perspectives focus on the support goals of the organization such as employee satisfaction, morale and interpersonal skills. Open system perspectives focus on the exchanges with the environment; this includes information processing, profitability, flexibility and adaptability (Campbell, 1977).

Ponemon and Nagida (1990) assert that the main reason for which accounting information is generated is to facilitate decision making. However, for financial reporting to be effective, among other requirements, it is relevant, complete and reliable. These qualitative characteristics require that the information must not be unfair nor has predisposition of favoring one party over the others. Accounting information should give a decision maker the capacity to predict future actions. It should also increase the knowledge of the users to identify similarities and differences in two type of information (Bolon, 1998). Therefore, reliable accounting information can be described as an essential pre-requisite for stock market growth. Based on the "engine of economic growth" potential of the stock market, developed nations do not toy with their Stock Markets and relevance of financial reporting. Hunton, (2002) study, which investigated the relationship between automated accounting information system and organizational effectiveness; showed that there was strong relationship between accounting information system and organizational effectiveness, which means access to accounting information will lead to organizational effectiveness. Several recent studies on value of accounting information for equity valuation, share price and earnings prediction have queried current financial reporting model in the developed world. The same issue can be raised in Nigeria about the value relevance of accounting numbers to investors. This assists the researcher to determine whether the result agrees or digresses from the previous studies.

In managing an organization and implementing an internal control system the role of accounting information system (AIS) is crucial. An important question in the field of accounting and management decision-making concerns the fit of AIS with organizational requirements for information communication and control. Although the information generated from an accounting information system can be effective in decision-making process, purchase, installation and usage of such a system are beneficial when the benefits exceed its costs. Huber, (1990) agrees that automated accounting information system aids decision making for management of organizations. Benefits of accounting information system can be evaluated by its impacts on improvement of decision- making process, quality of accounting information, performance evaluation, internal controls and facilitating company's transactions. Regarding the above five characteristics, the effectiveness of AIS is highly important for all the firms.

Theoretical Literature

Contingency Theory

Contingency theory suggests that an accounting information system should be designed in a flexible manner so as to consider the environment and organizational structure confronting an organization. Accounting information systems also need to be adapting to the specific decisions being considered. In other words, accounting information systems need to be designed within an adaptive framework.

Gordon & Narayanan (1984) concluded that environmental uncertainty is a fundamental driver for designing management accounting systems among successful organizations. A key finding in this study was that, as decision makers perceive greater environmental uncertainty, they tend to seek more external, nonfinancial and ex ante information in addition to internal, financial and ex post information. This latter finding has been confirmed by several studies that followed the Gordon and Narayanan paper. Although extensively studied in the last two decades, contingency theory has been given relatively little consideration in terms of the factors that influence the accounting information systems. Few organizations appear to have systematic processes in place for managing the evolution of their measurement systems and few researchers appear to have explored two of the main questions: What are the requirements of accounting information in automobile companies? And, how efficient is the accounting systems in automobile companies? The paper addresses these questions by providing empirical evidence of management accounting information contingencies based on a sample of selected automobile companies in Kenya.

Agency Theory

Agency theory has been one of the most important theoretical paradigms in accounting during the last 20 years. The primary feature of agency theory that has made it attractive to accounting researchers is that it allows us to explicitly incorporate conflicts of interest, incentive problems, and mechanisms for controlling incentive problems into our models. This is important because much of the motivation for accounting and auditing has to do with the control of incentive problems, (Kaplan and Norton, 1993). It is generally assumed that the principal is risk-neutral

and the agent is risk- and effort averse. The principal and agent are assumed to be motivated by self-interest, often leading to conflicting objectives. Agency theory provides a vehicle for formal, direct analysis of the economic elements of incentive compensation contracts based on effort levels or surrogates of effort levels. In conclusion agency theory is used in this research to address two questions; how do features of information, accounting, and compensation systems affect (reduce or make worse) incentive problems? And how does the existence of incentive problems affect the design and structure of accounting information systems? Agency theory provides a framework for addressing these issues and rigorously examining the link between accounting information systems, incentives, and behavior.

Behavioral Theory

Early behavioral theory accounting research explored bivariate relations between control system characteristics (for example; reliance on accounting performance measures or budget participation) and various criterion variables (e.g., performance or dysfunctional behavior). Behavioral theory accounting research evolved rather quickly, however, to more complex contingency models of the organization with a richer view of the organization and of individual behavior. Specific characteristics of the control system must be matched to the contextual variables that define the organization's environment. The (often implicit) assumption is that a better match is positively related to organizational performance (Kren and Liao 1988). Understanding control system design and effectiveness, in general, begins with analyses of the characteristics of specific organizations and their environments and this forms the basis of the researcher.

Determining Criteria of Effectiveness

There are many ways to measure the effectiveness of an organization. Campbell (1977) lists over 30 different criteria from productivity, profits, growth, turnover, stability and cohesion. Different theoretical perspectives can account for the diversity in usage of effectiveness measurements. Rational perspectives emphasize goal attainment and focus on output variables such as quality, productivity, and efficiency. Natural system perspectives focus on the support goals of the organization such as participant satisfaction, morale, interpersonal skills, etc. Open system perspectives focus on the exchanges with the environment -- this includes information processing, profitability, flexibility, adaptability. Effectiveness criteria also vary with time, and often subgroups have different effectiveness criteria. Also often there are different evaluation criteria applied by those who assign tasks and those who evaluate performance. Often effectiveness criteria involve self-interest, are stated as universalistic and objective, and cause conflict and disagreement among subgroups (Campbell 1977).

AIS and Organizational Effectiveness

Chenhall and Morris (1986) described AIS according to the perceived usefulness of four information attributes, namely scope, timeliness, level of aggregation, and integration. Scope refers to the measures being used and to the extension of AIS in time and space. Then information could focus on future vs. historical events or external vs. internal events. Also the information could be quantified in monetary or non-monetary terms. Timeliness refers to the frequency, speed of reporting and the orientation of the information (e.g. short or long run). Aggregation refers to the way data is aggregated in time periods, functions or in accordance with decision models. Finally, integration refers to the need of providing information to reflect

the interaction and coordination effects of several functions in the organization. These four attributes have been analyzed for comparing AIS and organizational strategies and performance (Gordon & Miller, 1976). Only recently have studies begun to examine whether organizations systematically vary the AIS design to support their chosen strategy, recognizing that AIS have the potential to facilitate strategy management and enhance organizational performance (Gordon & Miller, 1976).

Hunton (2002) study, which investigated the relationship between automated accounting information system and organizational effectiveness; showed that there was strong relationship between accounting information system and organizational effectiveness, which means access to accounting information will lead to organizational effectiveness. Several recent studies on value of accounting information for equity valuation, share price and earnings prediction have queried current financial reporting model in the developed world. The same issue can be raised in Kenya about the value relevance of accounting numbers to investors.

Appropriate review between designing of AIS and performance of commercial units by analyzing strategies explains that high performance of commercial units depends on a wide range of accounting information systems. Accounting information systems is an important mechanism of an organization that is vital for effective management decision-making in controlling organization. Generally, AIS is classified in two categories: a: effective decision-making for information that is largely for control of organization and b: to facilitate information that is mainly used for coordination of organization in decision-making are used. Effectiveness of AIS to increase system integration is to improve internal communications throughout the organization. Top management team with various planning and management information system influences on strategic performance (Boulianne, 2007).

Internal Controls

Internal controls encompass a set of rules, policies, and procedures an organization implements to provide reasonable assurance that; its financial reports are reliable, its operations are effective and efficient, and its activities comply with applicable laws and regulations. In managing an organization and implementing an internal control system the role of accounting information system (AIS) is crucial. An important question in the field of accounting and management decision-making concerns the fit of AIS with organizational requirements for information communication and control. Although the information generated from an accounting information system can be effective in decision-making process, purchase, installation and usage of such a system are beneficial when the benefits exceed its costs. Accounting Information System (AIS) as one of the most critical systems in the organization has also changed its way of capturing, processing, storing and distributing information. Nowadays, more and more digital and on-line information is utilized in the accounting information systems (Oguntimehin, 2001).

Management compares information about current performance to budgets, forecasts, prior periods, or other benchmarks to measure the extent to which goals and objectives are being achieved and to identify unexpected results or unusual conditions that require follow-up. In the same way that managers are primarily responsible for identifying the financial and compliance risks for their operations, they also have line responsibility for designing, implementing and monitoring their internal control system. Internal controls typically center around the company's accounting information system, which is the primary function for moving financial

information through a company. Therefore, internal controls help managers to monitor and measure the effectiveness of their accounting operations on performance (Ponemon & Nagoda, 1990).

Thus, the relationship between AIS and organizational performance would be moderated by the strength of internal controls. According to the previous argument we analyze the contingency fit between AIS, management performance and organizational effectiveness using accounting data, decision making and internal control process. Salih (1983) evaluated the internal controls of Ethiopian Airlines, Nairobi branch office and concluded that lack of segregation of accounting and custodian functions was the greatest weakness of the Branch office. He argued that there is need to centralize cash receipts, establish an internal audit, separate duties of purchase activities, establish perpetually inventory system for tickets.

Human Resources

Due to the novelty of this subject the researchers found few studies regarding the impact of human resources on the accounting information systems of firms. Also it should be noted that almost all the studies found addressed the subject of the impact of human resources on the AIS in a general way.

Flamholtz, Kannan-Narasimhan & Bullen (2004) indicates that Skillful and specialized human resources are of vital importance for an organization just like its physical properties and investments. Managers of the organizations spend a lot of money for training and educating their workers and employees in order to increase the efficiency of the organization under their control, but human resources accounting system which should be used for human resources information processing have not been used practically by any organization in Iran. The paper explored firstly, on whether investment decisions in AIS are affected by human resources. Secondly, it explored as to what factors can interfere in this effect? Thirdly, it examined which evaluation method of human resource is the most appropriate method consistent with Iranian companies in terms of qualitative characteristics of accounting information? The results indicate that human resources are of vital importance for an organization and affect on the optimal investment decisions in AIS and AIS implementation. Pekin Ogan, (1988), the purpose of this study was to report the results of a field experiment designed to assess the impact of human resource on investment decisions made by managers. The study was a partial replication and extension of studies by Tomassini & Oliver & Flamholtz. The findings of this study are similar to the earlier studies; human resource does make a difference in managers' investment decisions and enables managers to increase their level of confidence regarding decisions of this sort. Bo Hansson (1997), this study examines the pricing of knowledge-based firms compared with firms that are less dependent on human resources. The results show that an increasing dependence on human resources is followed by a rise in organizational performance hence high returns.

The design of the paper is descriptive research method. The target population for this paper is five of major established motor vehicle dealers in Nigeria as survey study with data from secondary source. A sample size of 75% was used.

Conceptual Model

The independent variable for this study is accounting information systems which are enforced by the human resources and enhanced by internal controls while organizational effectiveness is the dependent variable. The relationship between the dependent variable and the independent variables has been expressed using the function below.

$$Y=f(x1).....(1)$$

Where; Y = Organizational Effectiveness

X1 = Accounting Information Systems

Organizational effectiveness was measured by; □ Percentage increase in profits, revenue growth & growth in market share Accounting Information systems was measured based on the following dimensions; System quality, Information quality, Service quality, System use, User satisfaction and Net benefits. Specific measures of each dimension; System quality – the desirable characteristics of an information system. For example: ease of use, system flexibility, system reliability, and ease of learning, as well as system features of intuitiveness, sophistication, flexibility, and response times.

Information quality – the desirable characteristics of the system outputs; that is, management reports and Web pages. For example: relevance, understandability, accuracy, conciseness, completeness, understandability, currency, timeliness, and usability.

Service quality – the quality of the support that system users receive from the IS department and IT support personnel. For example: responsiveness, accuracy, reliability, technical competence, and empathy of the personnel staff. SERVQUAL, adapted from the field of marketing, is a popular instrument for measuring IS service quality (Pitt et al., 1995).

System use – the degree and manner in which staff and customers utilize the capabilities of an information system. For example: amount of use, frequency of use, nature of use, appropriateness of use, extent of use, and purpose of use.

User satisfaction – users' level of satisfaction with reports, Web sites, and support services. For example, the most widely used multi-attribute instrument for measuring user information satisfaction can be found in Ives et al. (1983).

Net benefits – the extent to which AIS are contributing to the success of individuals, groups, organizations, industries, and nations. For example: improved decision-making, improved productivity, increased sales, cost reductions, improved profits, market efficiency, consumer welfare, creation of jobs, and economic development.

Analytical Model

The algebraic expression of the regression model takes the following form

$$Y = a + X1 + \text{li}.....(2)$$

Where; Y = the dependent variable

a = a constant

β_1 = the slope of the regression

X_1 = the independent variable

ϵ_i = error term

The statistical significance of the relationships between the dependent and the independent variables was measured at a confidence interval of 95%. Analysis of variance between the independent variables and dependent variables was measured at a significant level of 0.05. If the P value of the model is less than the level of significance (0.05) then the independent variables would be taken as having an impact of the dependent variable. If the efficiency of accounting information systems increases, then organizational efficiency would increase. The study would conclude that accounting information systems have a significant impact on organizational effectiveness. If the p – value is greater than 0.05 then the model is insignificant and therefore the study cannot conclude that the independent variables have got a significant impact on the dependent variable.

Findings

The study measured the effectiveness of the Accounting Information Systems based on the various dimensions, including, system quality, information quality, service quality, system use, user satisfaction and net benefits of the AIS. The findings of the study indicated that the AIS used in the automobile industry in Nigeria are quality systems. The researcher evaluated various characteristics of an information system. These characteristics included ease of use, system flexibility, system reliability, ease of learning, as well as system features of intuitiveness, sophistication, flexibility, and response times. The findings further indicated that the quality of information was guaranteed. The results indicated that the outputs from AIS were clear, accurate, and timely.

The results of the study indicated that staff and customers utilize the capabilities of AIS. The results show that the web sites of the automobile companies are updated regularly and contain accurate information. The findings further indicated that AIS contribute to the success of individuals, groups, organizations, industries, and nations. Some of the benefits included improved decision-making, improved productivity, increased sales, cost reductions, improved profits, market efficiency, consumer welfare, creation of jobs, and economic development.

The study sought the challenges faced when using the AIS. The findings indicated that the major challenges were lack of proper training and lack of proper system documentation as some of the challenges they face. Further, the results indicated that high staff turnover is a major challenge of using the AIS. The results indicated that when the staff turnover is high, some of super trained staff leaves the organization and they happen to be having more information about the AIS than the normal users of the AIS. Other shortcomings included lack of finances and risk of obsolescence.

The findings of this study indicate that AIS is an important mechanism of an organization that is vital for effective management decision-making and controlling organization. The results are consistent with empirical reviews which indicated that there exist a relationship between AIS and organizational performance. AIS are an effective decision-making tool for controlling and coordinating the activities of an organization. The findings also indicate that an effective AIS increase system integration and improve internal communications throughout the organization.

The top management team with various planning and management information system influences on strategic performance of the organization.

Conclusion

Accounting information systems are critical to the production of quality accounting information on a timely basis and the communication of that information to the decision makers. Existing literature offers evidence of the relationship between these AIS and organizational effectiveness; though it is important to highlight that an in-depth study is required to examine other factors that may influence this relationship. The information value generated by AIS to shareholders and stakeholders in making investment decisions is invaluable. Financial managers need the financial and accounting data provided by AIS to evaluate the firm's past performance and to map future plans. This study showed that there is strong relationship between accounting information system and organizational effectiveness, which means access to accounting information, will lead to organizational effectiveness. Therefore, it can be concluded that accounting information systems have an impact on the effectiveness of automobile companies in Nigeria.

Recommendations

Finally, a similar study could be carried out focusing on the effectiveness of accounting information systems in enhancing the organizational effectiveness. Another study could also be carried out focusing on factors influencing implementation of accounting information systems or even challenges faced during implementation of accounting information systems in the automobile industry in Nigeria.

REFERENCES

Agha, E. (2013). "Nigeria: Volkswagen Rumbles Back to Life". Daily Trust, Abuja, Nigeria.

Bangura, Y. (1987). "The Recession and Workers' Struggles in the Vehicle Assembly Plants: Steyr-Nigeria". *Review of African Political Economy* (39): 4–22. JSTOR 4005851.

Bolon, M. (1998). Factors influencing the alignment of accounting information systems in small and medium sized Malaysian manufacturing firms.

Borthick, A. F and Clark, R. L. (1990), Making accounting information systems work: An empirical investigation of the creative thinking paradigm. *Journal of Information Systems*, 4(3).

Boulianne, E. (2007). Revisiting fit between AIS design and performance with the analyzer strategic-type, *International Journal of Accounting Information Systems*, 8 (16).

Campbell, J.P. (1977) "On the Nature of Organizational Effectiveness." In: P.S. Goodman & J.M. Pennings (Eds.), *New Perspectives on Organizational Effectiveness*, 36-41. San Francisco: Jossey-Bass.

Cheeseright, P. (1982). "Commercial vehicles: Too many plants in a declining market". Financial Times.

Chenhall, R.H. (2003): "Management control systems design within its organizational context: findings from contingency-based research and directions for the future", *Accounting, Organizations and Society*, 28, 2-3, 127-168.

Daft, R. L. (1983) *Organization theory and design*, Minnesota, West Publishing Company.

Gordon, L. A. and Miller, D. (1976). A contingency framework for the design of accounting information systems, *Accounting, Organizations and Society*, 1(1), 59-69.

Gul, F.A. (1991): "The effects of Management Accounting Systems and Environmental Uncertainty on Small Business Managers' Performance", *Accounting and Business Research*, 22, 85, 57-61.

Huber, G. P. (1990). A theory of the effects of advanced information technologies on organizational design, intelligence, and decision making, *Academy of Management Review*, 15(1), 47-71. *IBIMA Business Review* 12.

Hunton, J. E. (2002). Blending information and communication technology with accounting research, *Accounting Horizons*, 16(1), 55-67.

Kaplan, R., Norton, D., 1993. "The balance scorecard - Measures that drive performance, *Harvard Business Review*

Kothari C.R (1990). *Research Methodology method & Techniques - Second. Edition.*

Kren, L. (1992): Budgetary participation and managerial performance: The impact of information and environmental volatility. *Account Review*; 67: 511-26.

Flamholtz, E. G , Kannan-Narasimhan, R., & Bullen, M.L.(2004). Human Resource Accounting today: Contributions, controversies and conclusions. *Journal of Human Resource Costing & Accounting*, 8 (2).

Langfield-Smith, K. 1997. Management control systems and strategy: A critical review. *Accounting, Organizations and Society* 22(2): 207-232

Lve, M., YE, L.R. (1999): "Information technology and firm performance: Linking with environmental, strategic and managerial contexts", *Information and Management*, vol. 35, n. 1: 43-51. PII: S-0378-7206(98)00075-5

Mondy, R.W, (1990), *Management and organization behavior*. Boston, Allyn and Bacon Publishers.

Nicolaou, A.I. 2000. "A Contingency Model of Perceived Effectiveness in Accounting. Information Systems: Organizational Coordination and Control Effects.

N diaku, I. (1982). "Vehicle Assembly Plants in Nigeria As A Means of Technology Transfer/Acquisition: A Preliminary Assessment". *Africa Development / Afrique et Développement*. 7 (3): 22-36. JSTOR 43657733.

Oguntimehin, A. (2001). Teacher effectiveness: Some practical strategies for successful implementation of universal basic education in Nigeria, *African Journal of Educational Management*, 9(1).

Okeke, P. (1996). Marketing of Automobile Products in a Dwindling Economy: A Case Study of Anambra Motor Manufacturing Company (Anammco) and Volkswagen Coy. Of Nig (PDF) (Thesis). University of Nigeria.

Pekin Ogan, (1988) "Assessing the Impact of Human Resource Accounting Information on Managerial Decisions: A Field Experiment", *Personnel Review*, Vol. 17 Iss: 3, pp.29 – 35

Ponemon, L. A. & Nagoda, R. J. (1990). Perceptual variation and the implementation of accounting information systems: An Empirical investigation. *Journal of Information System*, 4(2),1-14.

Salih, M. A. (1982). Internal Control; the case of Ethiopian Airlines “a Masters project submitted to University of Nairobi.

Scott, W.R. (1977) "Effectiveness of Organizational Effectiveness Studies" In: P.S.Goodman & J.M. Pennings (Eds.), *New Perspectives on Organizational Effectiveness*, 63-96. San Francisco: Jossey-Bass.

Watts, H. (1999). *A Conceptual Framework to Financial Reports and Internal Audits*. Vol. 20. Wilkinson, J. W. (1993). *Accounting information systems: Essential concepts and applications*. Second Edition. New York: John Wiley & Sons Inc.

Wilkinson, J. W., Cerullo, M. J., Raval, V. & Wong-On-Wing, B. (2000). *Accounting information systems: Essential concepts and applications*. New York: John Wiley and Sons.