MANAGEMENT INFORMATION SYSTEM AND THE FINANCIAL PERFORMANCE OF LISTED CONSUMER GOODS COMPANIES IN NIGERIA

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Abstract

This study examined the effect of management accounting information system on the performance of companies listed under the consumer goods industry sector of the Nigerian Stock Exchange. The objectives of the study were; to ascertain the effect of sales management system on the profitability of listed firms in Nigeria; to examine the effect of management accounting reporting system on the profitability of listed firms in Nigeria and to investigate the effect of budgetary management system on the profitability of listed firms in Nigeria. A survey research design was adopted, sampling top and middle management staff of the 20 companies listed under the sector as at the end of 2018. Data collected were analyzed using percentages,tables while simple regression analysis and ANOVA statistical tool were used for testing the three hypotheses developed. The findings indicate that management system (measure with sales management system, management reporting system and budgetary management system) affect the financial performance (measured by profitability) of companies listed on the Nigeria Stock Exchange positively.This shows that accounting information system is an effective decision-making tool for controlling and coordinating the activities of an organization. Therefore, organizations should strive to strengthen their sales-force for effective revenue generation, encourage regular management accounting reporting together with effective budgetary control in other to attain viability in today's dynamic business environment.

Keywords: Management accounting information system, management information system, Sales management system, budgetary control system, financial performance.

Introduction



Accounting as a service provides documentary evidence of the existence of transactions in organizations. By this service, accounting plays the role of business language, providing records of transactions of organizations expressed in monetary terms. Predicated on the going concern concept, accounting is the science and art of collecting, classifying, summarizing and communicating data of financial nature required to make economic decisions (Osisioma, 1990). According to Abiahu (2014), an organization's accounting system provides a systematic means of collating, recording, analyzing and summarizing data and communicating the results to interested users.



Management accounting information system is a tool which, when incorporated into the field of Information and Technology (IT), were designed to help in the management and control of activities related to firms' economic and financial transactions. Accounting information as a part of the company's information system is seen as facilitating decision making within the firm and should be fitted to the firm's environment, requirements of task, and structure. Information is the most important resource in any organization. The flow of information within and outside are captured in financial documents, through the Accounting Information System, to form the basis of the vast number of decision making, to shape the organization and its economic relevance within the polity (Abiahu, 2014; Ozor, 2010).

Accordingly, an accounting information system is the structure that a firm uses to collect, store, manage, process, retrieve and report its financial data to aid decision making. Dey (2007) cited in Amahalu, Abiahu, Obi and Nweze (2018) posits thataccounting information is aunified structure within an entity, thatemploys physical resources and other components to transformeconomic data into accounting information, to satisfy the information needs of a variety of users.

Management accounting information system is an ingredient in all financial managerial decisions. In developed economies, these decisions are worth billions of dollars each year. In the past decade, rapid worldwide technological and socio-political changes have precipitated the "globalization" of the economy, where every industry and sectors' success, and in some cases survival, dependon the ability of organizations to compete globally. Fuelled by this change, organizations of all types, including business, government, education, health care, military, and research

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and development, have been rethinking their operations and management approaches. Faced with many of the same demands, such as cutbacks in funding, escalating costs, competition for limited resources, and a demand for higher-quality outcomes, these organizations have all felt the pressure to operate more effectively.

Business managers today, are much more concerned about the effect of competition than they were a few decades ago. They must react to the competitive threats not only from local source but also from regional, national and international sources; also, they must seek to explore all opportunities that are available in the immediate, national and global environments. Deregulation has also increased competitive pressure for organizations to survive, grow and prosper. In such a competitive environment, managers must employ a lot of the resources at their disposal as efficiently as possible to accomplish the objectives and goals of the enterprise.

Management Information System (MIS) provides information in the form of reports and displays to managers and many business professionals. The Management Information System describes the components and resources that takes into account the integrative nature of information flow as well as the structuring of the organization around decision centers, with the primary aim of aiding the proper functioning and monitoring of organizational activities. The management information system has changed the physical layout of offices to accommodate local networks and departmental integrated systems. It is also a formalized procedure to provide management at all levels and in all functions with the appropriate information from all relevant sources to enable them to take timely and effective decisions for planning, directing, evaluating, and controlling the activities for which they are responsible.

Even though management information system supplies decision-makers with facts, it supports and enhances the overall decision-making process. The effective delivery of an enterprise's products and services are supported by the Management Information System (MIS) which has a great influence on the market share portion, revenue generation, sales volume achieved, recruitment of best-qualified candidates, the goodwill of the enterprise and the customers' perception about the organization and its output. These systems should be comprehensive, accessible, flexible and useable at the appropriate levels of the organization's activities.

For years, managers have recognizedthat traditional accounting information aimed at the calculation of profit has been of limited value for planning and control purposes. The need for othernon-accounting information about the external environment such as social, economic, political, and technical development has come to the fore. A major task also facing management in almost every field of endeavour is to plan carefully so that the quantity and quality of information obtained will be adequate to meet its needs. To this end, the place of Information Technology (IT)in the running of any modern business venture.

Currently, most firms continue to increase spending on information system. Moreover, economic conditions and competitions continue to create pressures about the costs of information. As such, most firms focus on developing an information system to support decision systems, communication, knowledge management, and many other managerial processes in organizations.Based on the foregoing, this paper seeks to determine the effect of management accounting information system on the performance of listed manufacturing companies in Nigeria. Specifically, the paper attempts to examine the effect of sales management system on the profitability of listed manufacturing companies in Nigeria, together with the effect of management reporting system on the profitability of listed manufacturing companies in Nigeria as well as the effect of budgeting system on the profitability of listed manufacturing companies in Nigeria.

To achieve these objectives, it is hypothesized that:

1.H01: Sales management system does not have any significant effect on the profitability of quoted consumer goods companies in Nigeria.

2.H02:Management reporting system does not have any significant effect on the profitabilityofquoted consumer goods companies in Nigeria.

3.H03: Budgeting system does not have any significant effect on the profitabilityof quoted consumer goods companies in Nigeria.

Conceptual Clarifications

Concept of Management Accounting Reporting system



Management Information System (MIS) provides communication link that makes the activities and responsibilities surrounding management or managers possible.

The focus in Management Information System coupled with improved processing has led to the reduction in bottlenecks attached to the management process.

Three key elements that stand out in the concept of MIS are development and use, information system, and business goals and objectives (kroenke, 2011). According to Abiahu (2014), a management information system is organized to convert data from internal and external sources into information and communicate in the appropriate form, to managers at all levels in all functions, to enable them to make effective and timely decisions for planning, directing and controlling the activities of the organization. Information System (IS) is a group of components (computer hardware, software, data, procedures and people), that interact to produce information(Kroenke, 2011). These five components are present in every information system, for the system to be effective. Information is knowledge derived from data, whereas data is defined as recorded fact or figures (kroenke, 2011).Accounting information system according to Manchilot (2019) in Ganyam and Ivungu (2019) may be a computer-based electronic system used for collecting, storing, processing and communicating financial and accounting data through financial statements to support and guide the organizational decision-making process. The effectiveness of an MIS system must reflect its alignment with business goals and objectives. Miller (1992) posits that the reason for striving for alignment between the MIS function and organizational goals is to achieve maximize the contribution of Infomation System (IS) investments to the organization. He argued that a measure of successful alignment is the financial return on IS investment. There are different approaches to measure such returns. Economic analysis assesses the impact on financial outputs of the firm relative to inputs; measurement of the costs of the transactions of the firm; as well as cost-benefit analysis which assesses the total costs of a given information system and compares such with the total benefits to the organization expressed in financial terms (Miller, 1992).

Relationship between Accounting information and Management information

Accounting information as part of the management information is very essential in the performance of organizations.

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Accounting information system involves the effective combination of resources within the firm to provide actionable information for the organization's performance.

Accounting information performs this transformation whether they are manual systems or computerized. Further, the accounting information of any firm needs to be properly designed to enable managers to fully utilize resources at their disposal efficiently and effectively. In terms of effectiveness, accounting information makes use of accounting techniques and controls within the information technology framework to track all financial transactions of a firm to make available internal and external report on the activities of the business (Grande, Estebanez, &Colomina, 2012).

Similarly, Boocholdt (2009), stated that "accounting information involves data gathering, processing and provision of financial report for management decision making. Zimmerman (2003) stated that accounting information is an effective mechanism for effective performance and profitability of an organization. Therefore, accounting information should satisfy the user's requirement, that is, it should provide users with relevant information on the firm's performance.

Value Relevance of Accounting Information

Beaver and Demski(2011), agrees that value relevance research investigates the rel
tionship between a security price dependent factor and a set of independent accounting factors. Value relevance is measured as the statistical relationship between financial statement information and capital market values or returns of firms. The key commonality in the definitions is that accounting data is deemed value relevant if it has a significant relationship with security market value. The information perspective of value relevance is used for this study to determine the value relevance of accounting data of listed firms. Informational perspective measures the effect of accounting report to individual users without much emphasis on the precise structure of the relationship between accounting information and firm value (Bernard, 2014).

Achieving Efficient Accounting Information

Efficient accounting information is one that provides quality information that would be appropriate, timely, current, and accessible to all users.

A pre-condition for the above to be achieved is the prompt recording and proper classification of transactions from where necessary information is generated on a timely basis.

The information so generated is made available to the right people at the proper time and working conditions. Robinson, Davis and Alderman (2012) see the efficiency of the accounting information from the perspective of systems controls. System controls monitor the system to ensure efficiency and effectiveness of operations. Effective communication should occur in all directions, flowing down, across and up the firm, throughout all components and the entire structure. Monitoring is accomplished through routine activities, separate evaluation of activities or a combination of both.

Sales Management System

The America Marketers Association (AMA, 2019) defines sales management (or sales force administration) as the planning, direction, and control of the personal selling activities of a business unit, including recruiting, selecting, training, equipping, assigning, routing, supervising, paying and motivating as these tasks apply to the sales force. (America Marketers Association, 2019). Sales management is a business discipline which is focused on the practical application of sales techniques and the management of a firm's sales operations. According to the AMA, sales management involves three interrelated processes: the formulation of a strategic sales program;the implementation of the sales program; and the evaluation and control of sales force performance.Thus, sales management process monitors and measures each staff members' ability to either support sales or do the actual selling to customers.Jobber, Lancaster and Jamieson (2004) posit that the prime responsibility of sales management is to ensure that the sales function makes the most effective contribution to the achievement of the company's objectives and goals.

Budgetary control Systems

Osisioma(1989) cited in Eyisi (2003) define budgeting as a systematic and formalized approach for accomplishing the planning, coordination and control responsibilities of management. This implies that budgeting involves the coordination of these plans through management control and responsibilities as to achieve quantified plan which is formalized. A budget is a financial plan for a defined period, often one year. It may also include planned sales volumes and revenues, resource quantities, costs and expenses, assets, liabilities and cash flows.

Budgetary control is a system of controlling costs which includes the preparation of budgets, coordinating the departments and establishing responsibilities, comparing actual performance with the budgeted and acting upon results to achieve maximum profitability. Budgetary control is part of the corporate planning system.

Corporate planning is interwoven with budgeting and it serves as a system for coordinating the setting of objectives, preparing budgets and plans, mapping out strategies, preparing policy and procedures and monitoring of performance and results

To perform the control function effectively, managers need information accurately and timely to monitor progress toward their goals and turn plans into reality. Unless the right information is given, managers in the organization cannot stay on track or anticipate potential problems or decide corrective actions. Key features of budgetary control systems include the setting attainable objectives; assigning executive responsibility; planning the activities to achieve the objectives; comparing the actual result against the plan; taking corrective actions, and reviewing and revising plans in the light of changes.

The purpose of budgeting is to provide a forecast of income and expenditure (and thereby profitability), as well as serving as a tool for decision making. Budgets also provide management with a tool to monitor business performance.

Performance management



Performance management is a systematic process for improving organizational performance by developing the performance indices of individuals and teams. It is a means of getting better results by understanding and managing performance within an agreed framework of planned goals, standard and competency requirements (Armstrong, 2009). Performance management is much more than appraising individuals. It contributes to the achievement of culture change and it is integrated with other key Human Resources (HR) activities, especially human capital management, talent management, learning and development and reward management. According to Armstrong, 2009, performance management represents a process for establishing shared understanding about what is to be

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achieved and how it is to be achieved, and an approach to managing and developing people that improve the individual, team and organizational performance. More specifically performance management is concerned with:

1.Aligning individual objectives to organizational objectives and encouraging individuals to uphold corporate core values;
2.Enabling expectations to be defined and agreed in terms of roles, responsibilities and accountabilities (expected to do), skills (expected to have) and behaviours (expected to be);
3.Providing opportunities for individuals to identify their own goals and develop their skills and competencies;
4.Motivating people by providing them with recognition and the opportunity to use and develop their skills and abilities.

The overall objective of performance management is to develop and improve the performance of individuals and teams and therefore organizations. It is an instrument that can be used to achieve culture change in the shape of the creation of a high-performance culture. It aims to develop the capacity of people to meet and exceed expectations and to achieve their full potential to the benefit of themselves and the organization (Armstrong, 2009).

Theoretical framework
Systems theory

The systems theory offers solutions to handle complex situations of the input and output flows. It uses the theory of communication which helps to evolve a system design capable of handling data inputs, processes and outputs with the least possible noise or distortion in transmission from a source to a destination. In general, system theory unit of analysis presents an organization as a complex unit of interdependent parts. An open versus closed system is dependent on the environment for inputs which are transformed by the throughput activities to produce outputs that are exchanged with the environment.Skills and abilities are treated as inputs from the environment, employee behaviors are treated as throughout and employee satisfaction and performance are treated as outputs. In this model, the human resource management subsystem functions to acquire, utilize, retain, and displace competencies.

Resource-Based View Theory

The resource-based theory of the firm is a blend of economics and strategic management concepts, which posits that organizations can only be successful when they gain and maintain a competitive advantage. According to Porter (1985), cited in Barney (2001) competitive advantage is gained by implementing a value-creating strategy that competitors cannot easily available to competing firm must be variable among competitors, and second, these resources must be immobile (i.e. not easily obtained). Three types of resources associated with organizations are Physical (this includes items of plant and equipment and location); Human (employees' experience, knowledge and technical know-how) and Organizational (structure, organization's culture, and social relations).

The theory considers that the competitive position of a firm depends on its specific and not duplicated assets. The most specific (and not duplicated) asset that an enterprise has is its personnel. It takes advantage of their interdependent knowledge. That would explain why some firms are more productive than others.

In summary, this study is anchored on systems theory as the main theory, in that it entails the characteristics and features of management information systems as key management decision and control in organizations. However, the resource-based view theory provides the framework for analyzing the performance of such organization given the role of human resources in implementing an effective management information system.

Empirical review

Ikhatua (2017), conducted a study to ascertain if accounting information contributes to stock volatility in the Nigeria capital market. The study investigated the effect of accounting information on the volatility of stock market returns in Nigeria using the GARCH model. The result from the model showed that accounting information explains and account for stock volatility in the Nigerian stock market. Specifically, information on carrying values, earning per share, and dividend per share are found to be related to stock volatility.

Onaolapo and Odetayo (2016), assert that the accounting information system has a significant effect on organizational effectiveness with a research study carried out in selected construction companies in Ibadan Nigeria. The study examined the effect of accounting information system on organizational effectiveness specifically on the quality of financial report and decision making. Descriptive and inferential statistical tools were used to analyze the data with the aid of the Statistical Package for Social Sciences (SPSS). The hypotheses for the study were analyzed using ANOVA and the results showed that accounting information system affects organizational effectiveness.

Abdul-Kader and Luther (2016), studied Management Accounting Practices (MAPs) in the food and drinks industry in the United Kingdom to understand the level of MAP's in this industry. The research methodology used in this study was a survey questionnaire sent to 650 executives in the industry. In total, 245 usable completed copies of the questionnaire were received and analyzed. Respondents were asked to indicate the frequency of use of 38 management accounting practices (MAPs) using a Likert scale rating as well as to assess the importance of each technique/practice by rating these as 'not important, moderately important or important. The study found that as companies moved into a more uncertain environment, the sophistication level of management accounting practices increased. Likewise, as their power relative to customers' diminished, companies moved up the stages of evolution. Analysis of the management accounting practices used suggested that the management accounting systems employed in many foods and drinks companies were not particularly sophisticated. Taking the industry as a whole, there was little evidence of management accounting directly connected with 'value creation'.

Biwott (2015), carried out a research study on the impact of management accounting information on public sector organizations. The research adopted a cross-sectional survey research design and targeted a population of eighteen ministries of the federal government. Data was collected using primary source and a questionnaire based on a five-point Likert scale, oral interviews were also utilized. Qualitative data obtained were examined using both content analysis and SPSS for quantitative data. The researcher concluded that management accounting information supports decision making in an organization.

Adler, Everatt and Waldron (2015) conducted a survey that asked management accountants in New Zealand manufacturing businesses, to indicate the techniques adopted in their business. While many studies have focused on particular techniques such as ABC or target costing, the researchers provided a questionnaire that included a vast array of management accounting information techniques to provide a fuller set of response options. Their study found that management accounting information is necessary for organizational productivity.

Khurram and Aisha (2014) studied the value relevance of accounting information on stock prices, using the listed banks on Karachi Stock Exchange. A total of nineteen private banks were sampled using the pooled regression technique. Their findings show that earning per share is more value relevant than carrying values, while accounting data explained a high proportion of the stock price. The findings show that the accounting information system influences the economic decision of users by helping them evaluate past, present and future events.

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Amahalu, Abiahu, and Obi (2017) studied the effect of computerized accounting system and manual accounting system on the performance of quoted Microfinance Banks in Nigeria. The study adopted ex-post facto research design and using the Paired sample T-test to analyse the research hypotheses, research findings showed that microfinance banks that adopted computerized accounting system reported better financial performance than the microfinance banks using a manual system of accounting.

Also, in their study of management accounting practises in India, Anand, Edward and Robert (2014), studied the responses furnished by 53 CFOs in Indian corporations on their management accounting system. The survey questionnaire which also aimed to verify any significant difference between management accounting information and company growth found a positive relationship between the two variables.
Nielsena, Mitchell and Nørreklit (2015) studied the use of management accounting information in a complex and strategically significant decision-making setting. Using two case study companies with multiple decision participants and constrained information provision capabilities and uncertainties, the study reveals two methodological approaches to decision-making: analytical and actor-based. These methods reveal different ways managers deal with information uncertainty as well as making use of management accounting information and concludes that management accounting information and techniques play important roles concerning organisational complexities and strategic decision making situations.

There are also several recent studies on the value of accounting information for equity valuation, share price and earnings prediction have queried the current financial reporting model in the developed world. Although numerous studieshave been carried out on the effect of accounting information on theperformanceoflisted firms, however, this study will deal with the role of MIS systems on sales management and budgetary control systems as determining factors of firm performance, as such have not been covered in extant literature.

Methodology

This work adopted the survey research design, focusing on companies listed under the Consumer Goods Industry sector of the Nigerian Stock Exchange. These are companies engaged in the production and manufacturing of final goods that are classified for personal use rather than used in the production of other goods and include both durable and non-durable consumables. The consumer goods sector has 20 listed companies and collectively have a market capitalization of N3.81 trillion ($12.4 bn), out of total market capitalization of N24.87 trillion ($81.36 bn) as at March 2018 (NSE, 2018b), thereby accounting for over 15% of market performance of the Nigerian Stock Exchange over the period.

The 2017/2018 Fact book of the Nigerian Stock Exchange disclosed 20 companies that submitted their financial reports to the Exchange as at 31 march 2018 and this formed the population of the study. Using the survey as the main instrument to collect data, the respondents were requested to indicate their perception on the questions using a Liker scale with response ranging from “strongly agree” to “strongly disagree”.

The data obtained were analyzed based on correlation and regression analyses using the statistical package for social sciences (SPSS) and statistical tools such as frequency distribution and percentage analysis.

The respondents were top and middle-level management staff in the 20 quoted consumer goods companies. A total of 80 questionnaire forms were received from the respondents and analysed using the tools specified for the study.

Model Specification

The model for this study is stated as follows;

OP = f (SMS, MRS, BMS)
----------(1)
OP = β0 + β1SMS + β2MRS + β3BMS + e
----------(2)
Where;
OP = Organizational Performance (Profitability)
SMS = Sales Management System
MRS= Management Reporting System
BMS = Budgeting Management System
β0 =Intercept term
β1, β2 & β3 =Slope co efficients
e = error term

Table1: Percentage analysis of respondents' responses to the questionnaire

S/N	Questionnaire items on independent variables (Sales, reporting & budgeting systems)	SA	A	U	D	SD
1	Sales management system involves planning, directing and control of personnel and selling activities of sales-force.	40(50%)	30(37.5%)	2(2.5%)	4(5%)	4(5%)
2	Efficient management reporting system is the one that provides quality information that would be appropriate, timely, current and accessible to all users.	30(37.5%)	36(45%)	0(0%)	10(12.5%)	4(5%)
3	One of the key features of budgeting system is comparing the actual result against the plan and taking corrective actions.	30(37.5%)	30(37.5%)	12(15%)	4(5%)	4(5%)
4	Reliable information enhances the management decision making of a business.	34(42.5%)	30(37.5%)	4(5%)	8(10%)	4(5%)
5	Proper disclosures of financial information promote the growth of a business	26(32.5%)	30(37.5%)	0(0%)	14(17.5%)	10(12.5%)
6	Adequate timeliness of report of financial information shows business organizations' competence.	40(50%)	24(30%)	2(2.5%)	10(12.5%)	4(5%)
7	Accounting systems practices are integral culture in your organization.	44(55%)	15(18.5%)	5(6.25%)	6(7.5%)	10(12.5%)
8	Adequate measures must be kept for the organization to plan.	35(43.75%)	20(25%)	6(7.5%)	11(13.75%)	8(10%)
9	Proper forecasting measures must be put in place by management to determine suitable mark-up on cost.	40(50%)	20(25%)	0(0%)	15(18.5%)	5(6.25%)
	Questionnaire items on dependent variable (Profitability)					
10	Proper and adequate follow up of customers must be emphasized for growth.	48(60%)	22(27.5%)	0(0%)	7(8.25%)	3(3.75%)
11	Cost reduction must be given prompt and timely attention to make the business profitable.	46(57.5%)	20(25%)	2(2.5%)	10(12.5%)	2(2.5%)
12	Reliable information enhances the management of a business in the decision regarding marketing strategy.	20(25%)	43(53.75%)	3(3.75%)	9(11.25%)	5(6.25%)

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13	There is no budget for training and retraining of sales-force in your organization.	5(6.25%)	8(10%)	2(2.5%)	42(52.5%)	23(28.75%)
14	Proper accountability is useful for estimating the earning potential of the firm.	50(62.5%)	15(18.75%)	0(0%)	9(11.25%)	6(7.5)
15	Organizations' integrity about financial information enhances customers' confidence.	42(52.5%)	20(25%)	4(5%)	8(10%)	6(7.5%)
16	Good customer relationship is not only effective but efficient in your organization.	40(50%)	34((42.5%)	0(0%)	4(5%)	2(2.5%)
17	Information and communication technology does not enhance management decision making in product innovation.	10(12.5%)	8(10%)	2(2.5%)	40(50%)	20(25%)
18	Customer benefit and value-added strategies are necessary for profit planning.	44(55%)	15(18.5%)	5(6.25%)	6(7.5%)	10(12.5%)

Source: Field survey, 2019

Data Analysis and test of hypotheses

Hypothesis one:

Table 2: Result of Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.831[a]	.766	.763	.30605

a. Predictors: (Constant), Sales management system

Table 3: Result of Innov[a]te

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.510	1	40.510	45.690	.000[b]
	Residual	6.265	38	.165		
	Total	46.775	39			

a. Dependent Variable: Decision making (Sales Management)

b. Predictors: (Constant), Profitability

Table 4: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.461	.296		1.457	.128
	SALES MANAGEMENT SYSTEM	1.061	.068	.931	14.675	.000

a. Dependent Variable: Profitability

Table 4: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.461	.296		1.457	.128
	SALES MANAGEMENT SYSTEM	1.061	.068	.931	14.675	.000

a. Dependent Variable: Profitability

Based on the model summary, the R2 of 0.766 shows that about 76.6% of the variation in profitability is explained by the sales management system. The remaining 24.6% is as a result of other variables not captured in the model.Based on the ANOVA table, the F-calculated 45.690 is greater than the F-tabulated of 1.96 (from the statistical table) this shows that there is a relationship between sales management system and profitability. From the regression table, the t-statistics of 1.557 means that there is a positive relationship between sales management system and profitability. This means that 1.557% increase in sales management system, will lead to 14.675% increase in profitability.

Decision: Since the P-value of 0.00 is less than 0.05, we reject the null hypothesis and accept the alternative hypothesis and conclude that sales management system has a significant effect on the profitability of listed consumer goods firms on Nigerian Stock Exchange.

Hypothesis two:

Table 5: Result of Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.801[a]	.712	.707	.42636	.813

a. Predictors: (Constant), Management reporting system

b. Dependent Variable: Profitability

Table 6: Result of ANOVA[a]test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	29.867	1	29.867	18.302	.000[b]
	Residual	6.908	38	.182		
	Total	36.775	39			

a. Dependent Variable: Profitability

b. Predictors: (Constant), Management reporting system

Table 7: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.432	.347		1.246	.220
	MANAGEMENT REPORTING	1.050	.082	.901	12.818	.000

a. Dependent Variable: Profitability

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Based on the model summary, the R2 of 0.712 shows that about 71.2% of the variation inprofitability is explained by management accounting reporting. The remaining 28.8% is as a result of other variables not captured in the model.Based on the ANOVA table, the F-calculated 18.302 is greater than the F-tabulated of 1.96 (from the statistical table) this shows that there is a relationship between management reporting and organizational profitability. From the regression table, the t-statistics of 1.246 means that there is a positive relationship between management reportingsystemandorganizational profitability. This means that 1.246% increase in management reporting will lead to 12.818% increase in profitability.

Decision: Since the P-value of 0.015 is less than 0.05, we reject the null hypothesis and accept the alternative hypothesis and conclude that Management reporting system has a significant effect on the profitability of listed consumer goods firms on Nigerian Stock Exchange.

Hypothesis three:

Table 8: Result of Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.845[a]	.793	.790	.46171	.596

a. Predictors: (Constant), Budgeting system
b. Dependent Variable: Profitability

Table 9: Result of ANOVA[a]test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	67.674	1	67.674	17.458	.000[b]
	Residual	8.101	38	.213		
	Total	75.775	39			

a. Dependent Variable: Profitability
b. Predictors: (Constant), Budgeting system

Table 10: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.035	.212		.167	.868
	BUDGETING SYSTEM	.938	.053	.945	17.817	.000

a. Dependent Variable: Profitability

Based on the model summary,the R2 of 0.793 shows that about 79.3% of the variation in profitabilityis explained by budgeting system. The remaining 20.7% is as a result of other variables not captured in the model.
Based on the ANOVA table, the F-calculated 317.458 is greater than the F-tabulated of 1.96 (from the statistical table) this shows that there is a relationship between budgeting system and organizational profitability. From the regression table, the t-statistics of 0.167 means that there is a positive relationship between budgeting system and organizational profitability. This means that 0.167% increase in budgeting system will lead to 17.817% increase in profitability.

Decision: Since the P-value of 0.015 is less than 0.05, we reject the null hypothesis and accept the alternative hypothesis and conclude that budgeting system has a significant effect on the profitability of the listed firms in Nigerian Stock Exchange.

Discussion on Findings



The findings in hypothesis one revealed that sales management system has a significant effect on the profitability of listed firms in the consumer goods industry sector of the Nigerian Stock Exchange. These findings conform with the findings of Hunton (2014)that management accounting information affects organizational profitability. Also, the result of the test of hypothesis two revealed that management reporting system has a significant effect on the profitability of listed firms on the Nigerian Stock Exchange. These findings are in agreement with Adler, EverattandWaldron(2015)that management information system affects organizationalgrowth. The findings in hypothesis three revealed that the budgeting system operated in corporate organizations have a significant effect on the profitability of organizations. This result has also corroborated the views expressed by Osisioma (1989) in Eyisi (2003) indicating that the use of budgetary systems assist in the attainment of corporate objectives, and ultimately, the financial performance of these organizations.

Conclusion

The place of Management Accounting Information Systems in making effective decisions in an organizationcan not be overemphasized. The literature presented in this study exposed the critical role of management accounting information in the decision-making processincorporate organizations towards the attainment of corporate goals. This study has highlighted that management accounting information system should be accessible in supplying highlyneededinformation to guide decision making. This entails a carefully conceived, designed and executed information system capable of building a bridge between the managers of the organizations and the investors.
Based on the findings of this study, management accounting information system should be adequately deployed in every corporate organization to drive corporate sustainability in a rapidly changing business environment. Management information system should be seen as an important tool for the decision-making process in an organization and more encouragement should be given to its use to enhance efficiency and effectiveness of corporate organizations.

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