EFFECT OF MANAGEMENT INFORMATION SYSTEM ON ORGANIZATIONAL PERFORMANCE: A STUDY OF 7UP BOTTLING COMPANY ENUGU

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Abstract

Data are of no value unless utilized by the proper management personnel. Without a properly structured Management Information System, raw data are relatively useless. MIS supports the planning, control and operational functions of an organization by integrating data from various sources and providing uniform information for use as a basis for decision-making. In other words, it translates raw data into meaningful information that can be used in planning and control. The main objective of this study is to determine if Management Information System has any effect on organizational performance. The research method used was the survey method. The researcher thus used questionnaire and personnel interview for collecting primary data, texts and journals for collecting secondary data. The determined sample size was 297. The researcher in the course of this study found that there is a low level of appreciation and investment in Management Information System by 7up Bottling Company. Management Information System has effect on the performance of 7up Bottling Company. It can be concluded that any organization that has a low level of appreciation and investment in Management Information System (MIS), would not only have un-encouraging performance, but would experience uncoordinated free flow of information and work processed, with the attending consequences of organizational failure in actualizing its goal(s) and objective(s). It is therefore recommended that organizations should appreciate and invest seriously on Management Information System (MIS), viz adequate training and re-training programmes on Management Information System (MIS); effectively applying the acquired knowledge in practical terms, so that the desired goals and objectives could be achieved; using only the relevant information that are believed to be very vital to the realization of organizational goals and objectives; operating an open and participative information flow and decision both vertically and horizontally; and scrutinizing the information and decisions before they are adopted and executed.

Keywords: *Management Information System, Organization, Performance.*

1.1 Introduction

The past, present and future contain raw data that must be transformed into some raw logical form if they are to be useful to the management. Management information system transfers such data into meaningful information. "Data are of no value unless they are utilized by the proper management personnel. Without a properly structured management information system, raw data are relatively useless" (Aluko, Odugbesan, Gbadamosi, & Osuagwu, 2004). Management Information System (MIS) supports the planning, control and operational functions of an organization by integrating data from

various sources and providing uniform information for use as a basis for decision-making. In other words, it translates raw data into meaningful information that can be used in planning and control.

Management information system is more holistic in concept than merely computerized as an aspect of business. Many who embrace computer today in our country do not seem to understand this and therefore tend to believe that once an aspect of their company operations have been computerized the management problem have been solved. In the same vein, the collection of births and deaths rates can at best be a good data bank, but will never on itself alone be a Management Information System (MIS). The same goes for inventory, payroll and other computer programmers. Thus, computerization data banks, and such related subjects do not by themselves constitute a Management Information System (MIS).

Management Information System as a concept is designed to provide selected, decision-oriented information needed by management to plan, control and evaluate the activities of the corporation (Agu, 2015). The system is designed within a framework that emphasize profit, planning and control at all levels; contemplating the ultimate integration of required business information rules system, both financial and non-financial, within the company, (Agu, 2015). Modum (2010) posits that MIS is an information system using formalized procedures to provide managers at all levels and in all functions with appropriate information from all relevant sources (both internal and external to the firm). This is to enable them make timely and effective decision for planning and controlling any activity. Since the knowledge and understanding of MIS is to enable and guide the management of any organization to make good decision that would help them realize their goals and objectives, it therefore, behooves on the management of organizations to see that such decision taken are in the right direction, are of intents and purposes, and are highly beneficial and appreciated by both the organization and the public.

1.2 Statement of the Problem

All scientific and social scientific research is usually necessitated by a perceived problem (Uzoh, 2012). It is therefore, in the light of the above that this study is geared towards determining the impact of management information system on organizational performance.

Many who are conversant with organizational operations, particularly in Nigeria, will agree that it is not all organizations that practice Management Information System. And if there is any form of Management Information System at all, it is either not effectively practiced or such organizations are not fully aware of its existence in their organizations. Again, many organizations do not know the efficacy of Management Information System, due to their non-challant attitude towards Management Information System. Another problem associated with the application of MIS is its misconception. Many organizations think MIS is the same as computerizing organization or believing that once an organization is computerized, there is the existence of MIS. On the contrary, the MIS is wider then computerization. The computerization is a sub-system of the Management Information System, which is on its own a sub-system of the business, government or any organization.

It is equally, pertinent to note that there are some organization that would have loved to invest in Management Information System, but due to lack of finance they could not. This lack or inadequate finance is peculiar to greater percentage of middle, small and micro-businesses.

Objectives of the Study

The broad objective of the study is to investigate the impact of Management information system on organizational performance with special reference to 7UP Bottling Company. However the sub-objectives are:

i. To determine the extent to which Management Information System (MIS) has effect on the productivity of 7up Bottling Company.
ii. To ascertain the extent to which Management Information System (MIS) affect the profitability of 7up Bottling Company.

Research Questions

The following are the research questions to the study:

a. To what extent does Management Information System (MIS) affect the Productivity of 7up Bottling Company?
b. To what extent does Management Information System (MIS) affect the Profitability of & up Company?

Research Hypotheses

The following hypotheses have been formulated to guide the study:

   Ho_1 Management Information System has no positive effect on the productivity of 7up Bottling Company.

   HA_1 Management Information System has positive effect on the productivity on 7up Bottling Company.

   Ho_2 Management Information System has no positive effective on the profitability of 7up Bottling Company.

   HA_2 Management Information System has positive effect on the profitability of 7up Bottling Company.

Concept of Management

Management is a familiar concept and therefore, the word is in common use, as many definitions exist. Two typical and relevant definitions are:

1. Management is the direction of an enterprise through planning, organizing, coordinating and controlling of human and material resources towards the achievement of a predetermined objective. Strategic management is based on the belief that an organization should continually monitor internal and external events and trends so that timely changes can be made as needed. An organization must be capable of astutely identifying and adapting to change. The need to adapt to change leads the organization to key questions such as: what kind of business should the firm engage in? Is the firm in the right field? Should the firm re-shape its business? What strategies should it pursue? Other cognate questions could also be raised. (Aluko, Odugbesan, Gbadamosi, & Osuagwu, 2004).

2. The process of coordinating individual and group activity towards group goals.

Management is a process which takes place at all levels in an organization. It is not carried out by people with the word 'manager' in their job title. Section leader, supervisors, chief clerks, foremen, and so on, all carries out managerial function, although, obviously not all of the same type or of equal importance. It is the task which a person performs which is of importance, not job title.

If management is considered to be an activity with common principles, then, it is reasonable to assume that management skills, once acquired, would be transferable between different organizations, even between private sectors organization (such as manufacturing companies) and public sector organization (such as health service). Although, it is clear that all organization do have many problems in common, e.g. organizing personnel, allocating resources, etc. there are obviously major differences in philosophy between, say, a profit-seeking engineering firm and a church organization. It is this dichotomy that has led some management authorities to argue that the transferability of management skills is difficult. It is clear that there are management problems in all types of organizations. For this reason, the study of management principles and practice is likely to have wide-ranging benefits. (Cole, 2012).

Typically, three level of management can be identified in most organizations, namely top management, middle management and operational management.

Top Management: This level of management coordinates the activities of the business as a whole and has a strategic view of the organization. It is concerned with establishing overall objectives for the business and developing appropriate polices so that those objectives can be achieved. Typical of the flections of top management are long-range planning, capital investment decision, organizational restructuring, middle management appointment, acquisitions and mergers, etc. this is the overall policy-making section of management.

Middle Management: This may be termed the tactical level of management, whose overall function is to implement top management policy. This level of management does set objective, but these objectives are more limited in scope and subordinate to the objectives set by top management. Typical of the functions of a middle manager are purchasing, product planning, discount and credit policy, implementation of marketing and advertising polices, sales promotion and staff appointment.

Operational Management: This level of management is concerned with the day-to-day processes of supervision and direction associated with the normal activities of the business, e.g. production, dispatch, sales, accounts, etc. All the above levels of management need information for decision- making.

Theoretical Perspective

The past, present and future all contain raw data that must be transformed into some logical format, if they are to be useful to the manager. MIS transforms such data into meaningful information. Data are of no value unless they are utilized by the proper management personnel. Without a properly structured management information system, raw data are relatively useless. MIS supports the planning, control and operational functions of an organization by integrating data from various sources and providing uniform information for use as a basis for decision-making. In other words, it translates raw data into meaningful information that can be used in planning and control (Aluko, Odugbesan, Gbadamosi, & Osuagwu, 2004).

MIS is a system designed to provide selected, decision-oriented information needed by management to plan, control and evaluate the activities of the corporation. This system is designed within a framework that emphasizes profit, planning and controls at all levels. It contemplates the ultimate integration of required business information rule systems, both financial and non-financial, within the company (Stanford, 2014)

MIS is an information system using formalized procedures to provide managers, at all levels and in all functions, with appropriate information from all relevant sources (both internal and external to the firm), to enable them to make timely and effective decisions for planning, directing and controlling any activity for which they are responsible.

Because information originates from many sources in the organization, important information is often not found until it needs to be used in the control process. With the assistance of computers, management information systems arrange information so that performance can be measured against standards and necessary corrections may be made. MIS can also do the routine, yet, necessary, job of arranging and managing information that circulates throughout an organization at any given time. This assures a coordinated control effort.

Consider a company, such as 7up Bottling Company, operating at its normal level. One of its many branches is filled with managers, other employees and customers. Well over a million naira changes hands in the company every day. Transaction takes place continually as new products are produced and bottles are made in different shapes and sizes. Now, imagine what would happen if all these were handled manually, with each official and employee acting independently, without any central control or organization. How long would this continue to be a viable institution in today's competitive industries? The company's operations would be virtually chaotic without a management information system. Without MIS, planning and control are impossible in a large organization. It would not be possible for a company to keep record of thousands of transactions made on daily bases. Such information is required to determine whether control standards are being met or if any deviations need to be corrected.

Information is the result of translating data into a form that supports the management of a firm. From earliest time, data have been translated into symbols. A traditional example is the use of smoke signals by American Indians. The smoke represented data that could be changed to information for other Indians to understand and use (Aluko, 2010).

The most prevalent form of an information system has always been face-to-face conversion. This offers an easy, fast and friendly way to exchange information. Simple face-to-face management information system is sufficient if little information needs to be exchanged. No pertinent record is necessary and few people are involved. However this situation is seldom the case in contemporary organizations. Organizations today require massive amounts of complex information to be shared and stored.

The computer has become the foundation of MIS because of its ability to process, but many alternative ways do exist. With an investment of only a few hundred and thousand naira, most businesses can create an efficient and effective management information system. Computer files can replace the traditional paper files. Database management systems are available, decision support system can be developed, and intelligence can be used (Zikmund, 2011).

Requirements for an Effective Management Information System

The top priority of any management information is its adaptability to a user's needs. Each organization and its managers have peculiar control and planning needs. An elaborate system, suitable for a multinational manufacturer, would be impractical and cost-inefficient for a small retailer. Besides, a

personnel manager may have completely different needs from the manager of an accounting department.

MIS must be capable of meeting user's need, but the users must also know how to use the system. A sophisticated system is valueless if users do not understand its capabilities. Training is usually required to ensure that the users gain familiarity with the MIS. Lack of understanding also results in lack of confidence and lack of acceptance of the Management Information System. Users must observe directly how the system is meeting their needs. Three guidelines to assure that an MIS is meeting the needs of its users are:

1. The system must be related to the immediate and long-term goals of the users.
2. The system should not constrain the users. It must be flexible enough to allow the users to be creative, and not force them to think in a restricted manner.
3. The system should allow for adjustments. Users should be able to adjust the system to meet both individual and fresh organizational needs as these arise.

Numerous factors influence the overall structure of MIS, the more important ones being:

a. The primary function of the organization, (is it a manufacturing company, a wholesaler or a public authority)
b. The structure and level of the organization. (is the organization composed of numerous sections and levels? What degree of autonomy has the section departments?)
c. The degree of decentralization, (is the organization tightly controlled at the center? What decisions/actions are the sections allowed to take)
d. Influence with environment. (to what extent is internal information of importance? In what ways does the organization need to communicate with its environment- to customers, suppliers, trade unions, government departments?)
e. Decision that need to be taken. (what is the extent of programmed and non- programmed decision making)
f. The scale of operation. (how many employees? How many branches/departments/sections? What is the volume of orders, invoices, bills, enquiries, transaction, etc?)
g. The management style. (is it an authoritarian or participative style? Are procedures and operations routine and closely prescribed? Is management by exception practiced?)

It must be realized that an MIS has no intrinsic value of its own. It cannot be too strongly emphasized that the value of an MIS can only come from the system, and not from the producers of the information. The users, that is, management at all levels and functions can only cause value to be attributed to the MIS as a result of action based on decisions taken using the information provided. The values which may be input to any MIS can come from actions aimed at:

i. Increasing profits
ii. Reducing costs
iii. Utilizing resources more effectively, or helping to increase the present of future efficiency of the organization.

Methodology

The study adopted research survey method in which data will be collected across the population through questionnaire. The questionnaire will be administered to the employees who were selected using the simple random sampling technique.

Data for this study will be obtained from primary and secondary sources. The secondary data will be gathered through the journals, text books, internets as well as interview conducted with some members of the management staff.

The population for this study comprises of all the staff of 7-Up Bottling Company. According to 7-Up Plc Personnel Department, they are One Thousand, One Hundred and Fifty (1,150). The target population of this study comprise of the staff and management of 7-Up Plc in Enugu with prerequisite knowledge of the concept.

In determining the sample size of the population, the researcher adopted Taro Yamane's (1964) formula for sample size determination because the population is known. The formula is stated viz:

n $\quad=\quad\dfrac{N}{1+N(e)^2}$

Where: n = Sample size
N = Total population
e = Tolerable error
1 = Constant

Therefore n $\quad=\quad\dfrac{1150}{1+1150\,(0.05)^2}$

$\qquad\qquad=\quad\dfrac{1150}{3.875}$

n $\quad=\quad$ 296.

Approximately 297

In the distribution of the questionnaire, 297 were distributed but 250 were filled correctly hence it was used for the frequency table.

Objective 1: To Determine the Extent to which Management Information System has Effect on the Productivity of 7Up Bottling Company Enugu.

Table 1: Does employees understand management information system in 7Up Bottling Company.

Option	Frequency	Percentage (%)
Strongly agreed	166	66.40
Agreed	69	27.60
Indifferent	-	0
Disagreed	10	4.00
Strongly disagreed	5	2.00
Total	250	100%

Source: Field Survey, 2016

Table 2 shows that 166 (66.40%) of the respondents strongly agreed that they understood what Management Information System is all about in 7Up Bottling Company, 69 (27.60%) agreed that they understood what Management Information System is in 7Up Bottling Company, none indicated indifferent, 10 (4.00%) of them disagreed, while 5 (2.00%) of them strongly disagreed on the option.

Objective 2: To Ascertain the Extent to which Management Information System Affect the Profitability of 7Up Bottling Company

Table 2: Greater Capability to invest and Open Opportunities for Growth and Development

Option	Frequency	Percentage (%)
Strongly agreed	122	48.8
Agreed	104	41.60
Indifferent	-	0
Disagreed	1 5	6.00
Strongly disagreed	9	3.60
Total	250	100%

Source: Field Survey, 2016

Table 6 indicates that 122 (48.80%) of the respondents strongly agreed that the effect on Management Information System is to a greater extent enhance the capability to invest and open opportunities for growth and development, 104 (41.60%) agreed that Management Information System is to a greater extent enhance the capability in invest and open opportunities for growth and development, none indicated indifferent, 15 (6.00%) of them disagreed, while 9(3.60%) of them strongly disagreed on the opinion.

Empirical Findings

The major findings of the study are summarized below;

- The study found that Management Information System has positive effect on the productivity in 7Up Bottling Company.
- Also the study discovered that Management Information System has positive effect on the profitability of 7Up Bottling Company.

- Both the staff and management of 7Up Bottling Company, have adequate knowledge of Management Information System.
- There is low level of appreciation and investment in Management Information System.

Conclusion

Management Information System is of paramount importance to reach effective decisions in an organization. The literatures presented in the study explained the significant role of MIS in the decision-making process enhancing in an organization. MIS is deemed to be an integrated user-machine system that provides information to support operation, management and decision-making functions at various levels of an organization. Organizations are aware that MIS is a special-purpose system use for management objectives. The study has highlighted that MIS should be accessible in supply appropriate and high quality of information from its generation to the users. For MIS to be vital and effective, a careful conceived, designed and executed data base should exist to communicate the adaptive decision. From the analysis of the data and findings, the researcher would like to conclude as follows: Any organization that has a low level of appreciation and investment in Management Information System (MIS), would not only have un-encouraging performance, but would experience uncoordinated free flow in information and work processes, with the attending consequences of organizational failure in the actualizing its goal(s) and objective(s). Prior to starting an MIS project, organizations need to carefully review the transactional systems, the business processes and the need of management within an organization. As an MIS project grows, so does the cost of implementing solution, managing the information processes and monitoring daily activities. The result of an MIS project must provide value back to the organization in order to worth the cost. Many managers believe that, for Management Information System to be effective, all data systems must be combined. The value of MIS is based upon how much it can help managers manage. If this is bringing just the data needed from several systems and ignoring the rest for now, the end result still has worth, this is ultimate goal for management information system.

Recommendations

The researchers believe that the following suggestions will improve the Management Information System in organizational performances.

1. Organizations are strongly advised to appreciate and invest seriously on Management information System (MIS), viz adequate training and re-training programmes on Management Information System (MIS), so that effectively applying the acquired knowledge in practical terms, the desired goals and objectives could be achieved.
2. Organizations should make use of only the relevant information that is believed to be very vital to the realization of organizational goals and objectives.
3. Organizations should try as much as possible to operate an open and participative information flow and decision both vertically and horizontally, scrutinizing the information and decision before they are to be adopted.
4. The organizations must be focused in terms of their needs and the right technology to achieve goals, rather than acquiring unnecessary technologies because other industries have it.
5. Organizations should initiate a policy for motivation attached to Management Information System. Motivation include both extrinsic, such as more pay, allowance, fringe benefits, and intrinsic such as recognition, appreciation, acceptance by fellow workers, opportunities for promotion, and purchasing of current machines for storage of information, and consultation for important matters. Morale on the other hand increases productivity indirectly by reducing absenteeism, accidents, employee turnover and grievances.

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