MANAGEMENT INFORMATION SYSTEM AS A VERITABLE TOOL
FOR A SUSTAINABLE BUSINESS DEVELOPMENT AND GROWTH: A
SURVEY OF SELECTED FIRMS IN DELTA STATE

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Abstract
The paper aims at examining management information system as a veritable tool for a sustainable business development and growth: A survey of selected commercial banks in Warri, Delta State. The study spotlighted the objectives, advantages of management information system and information required by business organizations. The characteristics of an effective management information systems and the reasons why management information fail in organization system were also x-rayed. The primary data was obtained through structured questionnaire administered on 80 (eighty) senior staff of ten commercial banks in Warri, Delta State and all were retrieved while the secondary data was gotten from related textbooks. Data analysis was made using frequency counts and simple percentage tables and the hypotheses were tested using chi-square ($\chi^2$) statistical technique. The results showed a significant relationship between effective management information system, decision making and control. The study concludes that efficient management information system is a sine-quanon for business development and growth and recommends adequate training of employees, evaluation and controlling the system for an effective management information system in organizations.

Keywords: Management; Information, System; Veritable tool; Business; Development

Introduction
The success of any business organization lies in this ability to identify its critical problems and then to solve them by using proper decision making process with the help of collection of proper information related to these problems. An effective management information system is necessary for providing rational approach towards decision making for critical problems. Thus, real role of management information system is to provide information for decision planning and controlling operations.

As organizations have increased in size and scope of operations, the need for co-ordination of the many parts must be considered obvious so that the left hand is aware of the movement of the right. As competition has increased and resource scarcity has left organizations on the verge of failure, the use of efficiency as a criterion for the evaluation of organizational effectiveness has gained momentum. The changing environment of organizations and the resultant uncertainty has brought about renewed effort for effective environmental management. Organizations must now
continuously search their environment or at least put in under surveillance in order to be aware of new opportunities and threats.

Whether one is dealing with the issue of internal co-ordination of desperate organizational tasks and decisions to achieve integration and synergy, the judicious management of scarce resources to achieve efficiencies or the scanning of the environment to keep abreast with changes in the environment domain, information must be at one’s service. It will be impossible to achieve any of the above without information. Information and communication has been described as the linking process of management. it is this overwhelming importance of information in today’s organization that has brought about the widespread use of the computer and other forms of information technology to aid data processing and to provide information support for improved managerial decision making in business organizations. No effective decision can be taken and implemented to solve any problem in organization, unless the full information relating to the problem and its surroundings is made available, but it must be made available quickly. The right information at the right time reduces the risk of wrong decisions.

However, the research hypotheses formulated in the null form for this study would be tested and they are firstly, effective management information system has no significant relationship with decision making in organization and secondly, effective management information system has no significant relationship with control in organization.

**Literature Review**

Harnwell, (2007) defines a management information system as a system of collecting, analyzing, and processing data to providing the basis for effective management decision making. Jones (2003) views management information system as an information system that managers plan and design to provide themselves with the specific information they need to perform their roles effectively. Management information system is a formal method of collecting timely information in a presentable form in order to facilitate effective decision making and implementation in order to carry out organizational operations for the purpose of achieving the organizational goals.

Sharma (2006) sees management information system as a network of communication channels and information processing centres collecting information from its sources of origin, and supplying the processed information to the various users managing the organization. Ahuja (2003) views the following as objectives of management information system (i) To making information available when needed, where needed and in the format needed; (ii) To supply accurate information; (iii) To use the most efficient methods of processing data; (iv) To provide requested information at a reasonable cost; (v) To provide necessary security for important and for confidential information; and (vi) To keep the information function up to date.

Bhavesh (2005), identified the advantages of management information system to include: (i) It provides data base. Management information system concept result in the development of database that contains data generated by each of the functional areas of the organization; (ii) It results in greater efficiency; (iii) Resources are properly utilized since the system frees people to perform those functions that machine cannot perform; (iv) It brings about greater efficiency, management information system concepts enables organizations to improve
operations that are already being performed well; and (v) It results in reduction of operating costs and better control.

Karimu (2004) opined that the various types of management information which are commonly required by the general management in most of the business organizations are budgets, revenue statements, cost reports, statistical information and capital expenditure.

Ottih (1999) documented in a comprehensive list the main characteristics of a good management information system which includes:
- **Completeness.** Information must possess all the elements needed for making a decision and also it must offer alternatives to assist the decision-making;
- **Clarity and conciseness.** Information presented should be clear and concise, without any element of ambiguity;
- **Accuracy and reliability.** Information must be accurate and should be presented in such a manner so as to avoid misunderstanding and misinterpretation.
- **Timelessness.** Most current information with latest data must be made available to management;
- **Relevancy.** Information must be relevant, and unnecessary information are not supplied;
- **Simplicity.** Management information system must be simple and easy to understand and handle;
- **Consistency.** Information must be identical if it is gathered by different persons and same answers or results are obtained if two groups perform the same work of data collection;
- **Good structure.** Organizational structure of the system should be such that the responsibility is felt by all.
- **Effectiveness.** Information system must assist in the process of decision making and taking corrective action effectively and timely.
- **Summarization and condensation.** Information or data collected at the lowest levels must be summarized successively for high level management; and
- **Predictive ability.** System must be capable to predict or highlight the problem areas before their actual occurrence.

According to Akpovi (2006), management information system cannot be successful in the following circumstances.
- Inadequate requirements definition;
- No clear definition of mission and purpose;
- Lack of management participation;
- Mis-organization;
- Poor performance of key personnel;
- Mis-response to business plans;
- Lack of planning for (a) Facing the constraints, (b) Setting the project and system objective, (c) Maintenance of the system.
- Project development team and users do not communicate efficient because they do not speak the same language.
Effective management information system is lacking in most organizations in Nigeria. Lack of information render decision-making to be made under conditions of risk and uncertainty, while adequate information help in making decisions under certainty.

If the management is to make correct decisions, and take correct course of actions it is necessary that there should not be any confusion by (a) superfluous, (b) delayed or (c) confusing information. Management information system is utilization of organized information for managerial decision making. The need for using information in an organized manner is further increased in modern complex organizations, particularly when all such organizations are flooded with an enormous amount of data related to personnel, financial, marketing, production, service, etc.

The purpose of the study is to examine management information as a veritable tool for a sustainable business development and growth and to proffer workable solutions to problems militating against effective management information system.

To decompose the research problem, the following research questions and null hypotheses were formulated.

1. Does effective management information system influence decision making in your organization?
2. Does effective management information system influence control in your organization?

1. There is no significant relationship between effective management information system and decision making.
2. There is no significant relationship between effective management information system and control.

The aim of any business organization is survival through greater efficiency and profitable growth. The study is therefore important to modern business organizations because for it to survive and remain competitive, there must be effective management information system. This study would enable management to be sensitive to management information system in organizations.

The survey method was used for this paper. The instrument for the primary data was the questionnaire which was validated by lecturers and professionals in the field of the study and secondary data were obtained from relevant textbooks. The population of study consists of commercial banks operating in Delta State. A sample size of 80 employees of commercial banks in Warri were randomly selected for the study, namely; Guaranty Trust Bank Plc, Equitorial Trust Bank Ltd, Union Bank Plc, Intercontinental Bank Plc, Afribank Plc, First Bank Plc, UBA Plc, Access Bank Plc, Ecobank Plc, Zenith Bank Plc and administered with 80 questionnaire and
all were returned. The data collected were subjected to the inferential statistic test of chi-square ($X^2$) whose function is:

$$X^2 = \sum \frac{(fo - fe)^2}{fe}$$

Where, $X^2$ = Chi-square  
$fo$ = Observed frequency  
$fe$ = Expected frequency  
$\sum$ = Summation sign

Findings and Discussion

Table 1: Management information system and its significant relationship with decision making in organization

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency of Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>77</td>
<td>96.25</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>3.75</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Work, 2015

Table 1 above shows that seventy-seven (77) respondents are of the view that management information system has significant relationship with decision making in business organization. The respondents stood for yes at 96.25% while three (3) respondents stood against “No” at 3.75%

Table 2: Management information system and its significant relationship with control in organizations

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency of Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>75</td>
<td>93.75</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>6.25</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Work, 2015

Table 2 above shows that seventy-five (75) respondents are of the view that management information system has significant relationship with control organizations. The respondents stood for yes at 93.75% against “No” at 6.25%

Table 3 below, the calculated chi-square ($X^2$) is 68.46 and is greater than $X^2$ able value of 3.841. The null hypothesis is therefore rejected. It indicates therefore, that there is significant relationship between management information system and decision making in organizations.

Much of management planning, organizing, leading and controlling in organization is about making decision. For example, the marketing manager must decide what price to charge for a product, what distribution channels to use, and what promotion messages to emphasize. The production manager must decide how much of a product to make and how to make it. The purchasing manager must decide from whom to purchase inputs and what inventory inputs to hold. The human relations manager must decide how much employees should be paid, how they should be trained and what benefits they should be given. Top management must decide how to allocate scarce financial resources among competing projects, how best to structure and control the organization, and what business-level strategy the organization should be pursuing. Decision-making cannot be effective in an information vacuum. To make effective decisions, managers
need information, both from inside the organization and from external stakeholders. Managers’ ability to make effective decisions rest on their ability to acquire and process information.

Table 4 below, the calculated chi-square ($X^2$) is 61.24 and is greater than $X^2$ table value of 3.841. The null hypothesis is therefore rejected. Thus, management information system has significant relationship with control in organizations. To achieve control over any organizational activity, managers must have information.

Management information systems are used to control a variety of operations within organizations. In accounting for example, information systems can be used to monitor expenditure against budgets, managers need information on current expenditure, broken down by relevant organizational units. Accounting information are needed to provide managers with such information.

Table 3: Chi-square data and statistical computation

<table>
<thead>
<tr>
<th>Responses</th>
<th>Observed Frequency (fo)</th>
<th>Expected Frequency (fe)</th>
<th>$fo – fe$</th>
<th>$\frac{(fo – fe)^2}{fe}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>77</td>
<td>40</td>
<td>37</td>
<td>34.33</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>40</td>
<td>-37</td>
<td>34.23</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>80</td>
<td>-</td>
<td>68.46</td>
</tr>
</tbody>
</table>

Source: Research Data, 2015 (Drawn from table 1)

Table 4: Chi-square data and statistical computation

<table>
<thead>
<tr>
<th>Responses</th>
<th>Observed Frequency (fo)</th>
<th>Expected Frequency (fe)</th>
<th>$fo – fe$</th>
<th>$\frac{(fo – fe)^2}{fe}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>75</td>
<td>40</td>
<td>35</td>
<td>30.62</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>40</td>
<td>-35</td>
<td>30.62</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>80</td>
<td>-</td>
<td>61.24</td>
</tr>
</tbody>
</table>

Source: Research Data, 2015 (Drawn from table 2)

Conclusion
This study aims at examining management information system as a veritable tool for a sustainable business development and growth – A survey of selected commercial banks in Warri, Delta State and proffered strategies to be adopted for an efficient management information system in organizations. From the study, it suffice to conclude that efficient management information system is very vital for business development and growth, for effective decision making and control in business organizations.

Recommendations
The following recommendations are made based on the findings and conclusions of this study.

1. Management should create formal training programmes, with appropriate back-up support, to help train employees to use the new information systems and technologies, making sure that these systems are user-friendly as possible.

2. Top management should be involved in the design of management information systems. This involvement would mean greater acceptance and commitment resulting in an overall commitment to the programme by all-level users in the organization.
3. Maintenance of the system. This is necessary to keep the management information system at the highest levels of effectiveness and efficiency within the cost constraints. The idea of maintenance of the management information system is to reduce the errors due to design or environmental changes.

4. Controlling the system. System should be operated in the same way for which it was designed and do not allow the operators to develop their own methods or shortcuts procedures.

5. Building co-operation between designers and the users of the programme. This co-operation will result in proper feedback on the quality of information being received so that necessary changes in the design can be made. This co-operation will result in improvement in the effectiveness of management information system.

6. Evaluating of the management information system. After the management information system has been operated smoothly for a short period of time, an evaluation of such step in the design and of the final system performance should be made. This is a feedback about the system.

REFERENCES


