MANAGEMENT INFORMATION SYSTEM (MIS) AND BUSINESS SUCCESS: A TECHNIQUE FOR GOAL ATTAINMENT IN HOTEL MANAGEMENT

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Abstract

In today's unpredictable hotel business environment, service organizations every day are increasingly faced with the challenges of attaining their specific goals and objectives. The prevailing global economic recession in Nigeria coupled with the growing dependence on information technology in hotels have heightened the need for hotel managers and entrepreneurs to re-think strategies on how best to achieve the goals of their organizations within record time. This paper, however identified Management Information System (MIS) as a computer based management technique, which involves the study and application of the information needs of an organization's management at all levels. It prescribes Management Information System (MIS) as a potent instrument which can be established, adopted and developed to facilitate operational, tactical and strategic decision making process by every organization wishing to meet the demands of the environment and achieve their expected goals. Therefore, computer based Management Information System (MIS) is recommended as an invaluable management strategy support technique which can be developed to assist management in understanding the effect of their strategies and help to enable effective decision making, useful for the attainment of organizational goals mostly in hotels.

Keyword: MIS, goal attainment, Hotels.

Introduction

Issues about the effect of globalization in the third world countries, Khor (2000) declared that globalization has become the defining process of the present age. Khor stated that the breaking down of economic barriers between countries have affected not only national policy making but also the existence' and survival of many hotel business organization both public and private especially, in the developing countries. Khor (2003), argues that business organizations everywhere like hotels are now faced with unpredictable operational environment. The attainment of their organizational goals and objectives have- also been threatened by the effects of the recession in developing country like Nigeria, which was brought about by unbridled economic globalization. The above situations have heightened the concern for hotel managers and entrepreneurs to re-think strategies on how to manage their organization more efficiently and effectively. In recent years, the importance of information management has come to focus as a result of the increased complexities of organizations, which result in diversity of information needs to manage in all functional and at all levels. Increasing organization complexity has also brought about the problem of complexity of decision making process. The concept of management information system (MIS) contains three individual concepts namely: management, information and the functional system of the organization. This paper strongly advocates the establishment of Management Information System needed by managers to manage their Hotels efficiently and effectively.

Management Information System: An overview

Management Information System is basically a facilitating system for hotel managers in developing decisions, related to planning, directing, staffing; organizing and controlling functions. Information is
the central concept in Management Information System (MIS). Information consists of classified and interpreted data that are used for decision making. Generally, Management Information System is a group of people, a set of manuals, and data processing equipment (set of elements) which select, store, process and retrieve data (i.e. operate on data and matter) to reduce the uncertainty in decision making, and ask, seek a common goal by yielding information for the management to a time, they can mostly use it or refer to it. An information system must be structured to provide every management with the information that are relevant to their decision making needs. MIS is an organized approach to the study of the information needs of an organization’s management at every level in making operational, tactical and strategic decisions.

Its objective is to design and implement procedures, processes, and routines in a timely manner. In the past hotel organizations recognized the importance of managing resources such as labour, capital and raw material. Today, it is widely accepted that managing the information resources are very often and equally important. Management Information System supports the process of collection, manipulation of storage, distribution and utilization of an organization resources. This is now referred to generally as the application of information technology to support the major functions and activities of either a private or public sector institution or organization. In a Management Information System; modern computerized systems are used to continuously gather relevant data, both inside and outside of an organization. This data is processed, integrated and stored in a centralized database (or data warehouse) where it is constantly updated and made available to all who have the authority to, access it; in a form that suit their purpose. The term MIS is also used to refer to the people in hotels who manage these computerized systems.

The Computer and Management Information System
The use of computers has now become indispensable in the operations of modern MIS. Computers provide MIS with capabilities not possible in human information systems. The trend of using Computer Based Information System (CBIS) for contemporary MIS structure have expanded for the following reasons: (Onwuchekwa, 2003)

a. Complexity of present organization in terms of size, organization structure, geographically dispersed location, technology employed, required increasingly diverse information.
b. The vast capability of computer in hotels to store, retrieve, process data and present information in desired forms.
c. The availability of user friendly software packages and software specialists in ever increasing numbers in hotels.
d. Compatibility of the hardware with communications and teleprocessing infrastructure in hotels.
e. Greater levels of precision and accuracy required in monitoring, protection processes in high-tech areas in hotels.
f. Possibility of programming, routine, structured and time consuming decisions in hotels.

Some specific features of hotel Computer Based Management Information system are as follows:
- Organizing and updating of huge mass of raw high accuracy and large computer memory facilities, the storage of large volume of data and information which can be retrieved easily as and when required [Elliot and Sheldon, 2008].
- Input data can be a variety of purpose.
- Expanded scope of using the information system widened scope of analysis
- Integration of different information sub-system working, in organizing early business computer used for simple operations such as tracking sales or payroll data with little detail or structure.

Over time these computer applications became more complex, hard ware storage capacities grew and technologies improved for connecting previously isolated applications. As more data was stored and linked, hotel managers sought greater details as well as greater abstraction with the aim of creating entire management reports from the raw stored data. The term MIS arose to describe such applications, providing, hotel managers with information about other data that would help in managing the organization. (Levinson, 2001).
Types of Information System
Information system usually belong to two different types; structured and unstructured information system; information processing activity, is formalized and publicized. Whereas in an unstructured information system, the information processing is neither formalized nor publicized; information system can also be categorized into public and private information systems and formal and informal systems.

Public information systems are designed to provide for the organizations. They are characterized by the presence of formal documents and records.

Private information system is designed to limit the availability of the information to the selected individuals. Generally the private information systems are meant for supplement or duplicating the efforts of public information system and they have no other recording or predestined process of retrieval (Perrow, 2007).

Formal Information system are those which follow the hierarchical starter of an organization. This is an information system in which all the persons who are using information are authorized to use, and are also responsible for dissemination of specific information.

The importance of MIS in the management of contemporary organizations of modern day, have the following reasons.

a. The system utilizes information which are the common Denominator underlying the management functions of planning, organizing, directing and control.

b. Information systems are closely related to the basic organizational objectives, policies and strategies established by the management.

c. MIS helps hotel managers to obtain valuable insight into the system operations and control operation while formulating their information requirements.

d. Information system has a major impact on the utilization of physical, human and financial resources of a productive system.

e. An understanding of the capabilities and limitations of information system technology, will enable hotel management to direct and measure its contribution to organizational objectives.

f. MIS will enable the hotel management to distinguish between information oriented problems and those which have other underlying causes (Simon, 2009).

The Primary Data and Information in MIS Application
Data and information are two indispensable variables upon which every successful MIS is built. Data are unstructured raw facts in isolation which do not convey any meaning to the recipient. Data refers to material that has not been evaluated for its work to a specified individual in a particular situation. Every management information system are set up to convert data into useful information which are directed to the achievement of the organizational goal. The illustration below shows data as an input to the information system as processor which produces information as an output (Martin, 2000).
Information system as (processor) of data (input) to produce (information) output

![Fig. 2](image)

The processes which the information system needs to convert raw data into meaningful information are discussed below:

1. **Capturing**: this involves recording of data from an event or occurrence in some form such as personal appraisal forms, purchase orders, market boom etc.
2. **Verifying**: checking and validating of data to ensure that it was captured and recorded correctly.
3. **Classifying**: placing data elements into specific categories which provide meaning for the user.
4. **Arranging (sorting)**: placing data elements in a specified or predetermined sequence
5. **Summarizing**: Combining or aggregating data elements i.e. accumulating data in a mathematical sense.
6. **Calculating**: Arithmetic and/or logical manipulation of data. For example computations to calculate employees pay, customers bill, students grade point etc.
7. **Storing**: Placing data on some storage media such as paper, microfilm, magnetic tape, disk etc, where it can be kept for access and retrieval.
8. **Retrieving**: This involves searching out and gaining access to specific data elements from a medium where it is stored.
9. **Reproducing**: It is the process of duplicating data from one medium to another. For example file of data stored on a magnetic disk may be reproduced into another storage device for further processing for security reasons.
10. **Disseminating/Communicating**: This is the process of transferring data from one place to another for use by any section of the organization that has need for it. (Onwuchekwa 2003).

**Developing a Management Information System for the focal Organization**

The actions that are taken to create an information system that solves an organizational problem are called system development. These include system analysis, system design, programming/implementation, testing, conversion, production and finally maintenance. These actions usually take place in that specified order but some may need to repeat or be accomplished concurrently.

In establishing an effective MIS for an organization, the system developer should have the following expectations in mind.

- The system should be made to provide timely and accurate information to the decision maker, the timeliness being determined by the user of the information.
- It should be built to be responsive to the management inquires for information
- It should provide management with exception reporting
- It should be capable of future expansion
- It should be accepted by intended users (Taylor, 2005)
Most MIS are developed essentially to produce fixed, regularly scheduled reports based on the data extracted and summarized from an organization’s inbuilt, functional activities, transactions and processing systems. The system can be developed to take care of a specialized area of business activity and make information available to the low, middle and operational level managers to equip them in solving structures and semi-structured decision problems. The system developer may decide to establish the MIS system, based on the following formats and depending on the business line of the organization (Dill, 2005).

- **Decision Support Systems (DSS)** are computer programme applications used by middle management to compile information from a wide range of sources to support problem solving and decision making.

- **Executive Information System (EIS)** is a kind of reporting tool that provide quick access to summarized reports coming from all organization level and departments such as human resources, accounting and operations.

- **Marketing Information System (MIS)** are designed specifically for managing the marketing aspects of the business.

- **Office Automation System (OAS)** is designed to support communication and productivity in the enterprise by automating work flow and eliminating bottlenecks. OAS may be implemented at all levels of management.

- **School Management Information System (SMIS)** this is designed to cover school administration, it often include teaching and assessment materials (Kotler, 2006)

In developing the MIS, it is pertinent for the developer to identify the information needs of the objectives. The cornerstone of any MIS is important to understand the role of the management in the organization together with its responsibilities and the decisions, it is likely to make, and to identify the kinds and amounts of information needed by then to arrive at those decisions.

**Goal Identification and the Decision Making Process**

Goal setting and identification ideally involves establishing specific, measurable, attainable, realistic and time-targeted objectives for the organization. Organizational goals serve as a source of identification, motivation and attachment for both participants in the organization and the external publics (Cohen, 2002). Goals serves as an effective tool for making progress by ensuring that organizational participants have a clear awareness of what they must do to achieve or help achieve an objective.

Every organization must first understand the fundamental goals it was set up to achieve and subsequently alight its decision process to meet such goals. There are various types of organizational goals which are recognized as the desired state of affairs or preferred results that organizations attempt to realize and achieve. Goals may also represent a consensus arrived at by the management and other members of the organization (Beach, 2005).

Perrow (2002) provides a useful scheme for identifying organizational goals as follows:

- **Official goals:** These goals are the formally stated goals of an organization usually described in its charter and annual reports and they are emphasized in public statements by key executives.

- **Operative goals** are the outcomes that the organization actually seeks to attain through its operating polices and activities.

I however, most social organizations today have multiple stakeholders-groups of people, and subsequently has multiple goals, which, at times may be mutually conflicting. According to Perrow, multiple organizational goals can be classified into four major categories.

- **Output goals:** these goals are the "end product such as products, services, health care, or Education.

- **System goals:** These goals are the organization itself and they consist of such things as growth, stability, profit, market share etc.

- **Products goals:** product goals consist of the characteristics of the goods or services, such a quality, styling, uniqueness, variety and price.

- **Derived goals:** This refers to the way an organization use its power and influence to achieve other social or political goals (such as employees welfare community services or political arms).

Minzberg (2005) provided four further classifications of goals as follows:

- **System goals:** He identified four goals for a systems as survival, efficiency, control, and growth.
Formal goals: Formal goals are used by the management to tell the members of the organization what to do.

Ideological goals: These goals are what the people within the organization believe in.

Shared personal goals: These are what the organizational participants come together to accomplish for their mutual benefit.

The broad classification of goals should be succinctly identified and articulated by the organizations management and brought to the awareness of all participants in the organization. For most organizations today, goals are constant and members of the organization must respond appropriately by formulating new goals as well as deciding which goals will be accomplished and in what order. Development of a management information system for the organization will be geared to support the decision making process of the management by identifying decision needs and supplying supportive information.

[Decision Making is the process of selecting among several alternatives, the best alternative in order to resolve a conflict. Decisions are typically characterized as unstructured, semi structured. In all decision making situation, the MIS can provide assistance to the decision maker through provision of information that accurately models the managed system. The supporting system must provide easy manipulation of information and must be responsive to adhoc and emergent inquires.

The management information system as a supporting system should be designed to have value to the decision maker by allowing the managers to make quick evaluations of the various alternative decisions. Any decision process that can be defined in a procedure and issued to an organization is an example of a structured process; such structured decisions can be automated and computerized. The objective of the MIS will be to ensure that all the structured decisions are computer generated and the managers need not spend time making structured decisions.

The management as decision makers in the organization have a rate at which they can assimilate information, which determines their information processing, and efficiency. A manager's past knowledge coupled with his individual decision processing efficiency, determines his individual decision making capacity. Faced with alternatives, the manager as a decision maker, identifies the organization's goals and objectives and then tends to attain these goals by choosing the best alternative, based on the knowledge he possessed. Decision making is a rational information using process, not an emotional process.(Churchman, 2007).

The process of developing and implementing an information system can be divided into twelve discrete steps:

- Establish the need for the system
- Conduct a feasibility study
- Obtain management approval
- Train the system users
- Develop an overall design concept
- Design the system in detail
- Test the system
- Construct the data files
- Document the system
- Implement the system
- Evaluate the system
- Maintain the system

Though these steps are listed sequentially, some may proceed paralleled with others.

The developed management information system in an organization can be applied in the following key areas of an organizations activities and more.

**Enterprise Resource Planning (ERP):** Here the MIS provide an organization with integrated software modules and a unified data base which enables efficient planning, managing and controlling of all core business processes across multiple locations. Modules of KKF may include finance, accounting, marketing, human resources, production inventory management and distribution.

**Supply Chain Management (SCM):** This will enable more efficient management of the supply chain integrating the links of the supply chain. This may include suppliers, manufacturer, wholesaler, retailers and final customers.
Customer Relationship Management (CRM): This will help the business to manage relationship with potential and current customers and business partners across marketing sales and service.

Knowledge Management System (KMS): This will help the organization to facilitate the collection, recording, organization, retrieval and dissemination of knowledge. This may include documents, accounting records, and unrecorded procedures, practice and skills.

After the system has been developed and has achieved a steady operation, it is necessary to evaluate, measure its performance and maintain it. This is necessary because business does not operate in a static environment. Internal and external factors are always in a state of flux. Market tastes shift, product and process technologies evolve and government passes new laws. These changes naturally have impact on the organization and the information system (Ansoff, 1984).

Conclusion

MIS is the management of contemporary organizations of modern day, utilizes information that are common denominator underlying the management functions of planning, organizing, directing and control in hotels with capabilities and limitations of information system technology, which enable hotel management to direct and measure its contribution to organizational objectives. MIS will also enable the hotel management to distinguish between information oriented problems and those which have other underlying causes.

Recommendations

Hotel organizations have continued to re-assess their goals and the strategies adopted in achieving them in order to meet with the growing challenges. The paper however, recommended the following:

1. That the system should be made to provide timely and accurate information to the decision maker, the timelines being determined by the user of the information in the hotel management
2. It should be built to be responsive to the management inquiries for information
3. It should provide management with exception reporting at all times.
4. It should be capable of future expansion.
5. It should be accepted by intended users.

References