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Abstract:
Information has become an essential resource for managing modern organizations. This is so because today's business environment is volatile, dynamic, turbulent and necessitates the burgeoning demand for accurate, relevant, complete, timely and economical information needed to drive the decision-making process in order to accentuate organizational abilities to manage opportunities and threats . This paper is a reflection of amassed discourse available in literature concerning the nexus between management information systems – MIS and corporate decision- making. The paper suggests that a painstaking development and management of MIS in organizations is capable of triggering decisions that would not only be fast and accurate but would be in line with industry best practices and ultimately result in organizational efficiency and effectiveness.

Key words: Management, Information, Systems, Management Information Systems, Corporate Decision- Making

1.Introduction

The information needs of modern organizations have become quite enormous and challenging to the extent that every organization needs to pay great attention to how information is gathered, stored, disseminated and utilized. This situation has arisen because of factors such as increased organizational size, expanded operational scope, competitive influence and overall environmental vagaries. Today's organizations require tools to support quicker and automated decisions, as well as ways to minimize uncertainly; only an effective management information system can ameliorate this challenge.

The term management information systems, popularly abbreviated as MIS according to Lucey (2005: 23) has become synonymous with computer; yet, both concepts are not exactly the same because management information systems existed in the life of pre-modern organizations long before the advent of the computer technology. This argument is substantiated by the fact that computer was not in use when organizations kept records using traditional and manual mechanisms to manage information. It is important though to pinpoint that the computer takes credit for increased interest in management information systems because it eases and facilitates data processing as well as adds new vistas of interesting career options in MIS (Ottih, 1995:4).

With faster access to needed information through MIS, managers are able to make effective and timely decisions regarding investments, employment, new products and many more as it concerns their organizations. By decision - making, we refer to the process of choosing certain lines of action from among numerous alternatives. Decisions is basically an integral chunk of management and it occurs in every level (e.g, top management, middle management and lower management) and in every function (e.g, marketing, accounting, human resources, and production) (Lucey, 2005).

The effectiveness or otherwise of any organization is dependent on the quality of decisions that informs its operation. If decisions are right, it translates in positive organizational outcomes, but where organizational activities are executed in conditions of poor decisions resulting from insufficient or inaccurate information, such organization could be doomed. This is why decision making is a major determinant of organization's success or failure.

Taking into cognizance the level of risk involved in making decision under high uncertainty, and the scholarly convergence that effective management information systems ensures good decisions (see, Jawadekar, 2006; Vital and Shivraj, 2000, Rhodes, 2010 and Jarboe, 2005) respectively, one would think that any organization that hungers for effectiveness, efficiency would seek to make relevant decisions at every point of its operations; and making good decision we think is a product of effective management information systems.

The questions are; do all business practitioners know this? Even if they do know, have they adequately embraced MIS practice? It is on this backdrop that the thrust of this paper is founded. To theoretically appraise the nexus between management information systems and decision – making in today's organizations. To achieve this, the paper shall discuss the meaning of MIS, the meaning of Decision making, review scholarly opinions on their relationship and draw conclusion based on unraveled evidences

2.Literary Reflections

Kumar (2006) and Gabriel, (2012) respectively converged in opinions that defining management information systems would first require splitting the subject into three facets of: Management, Information and Systems respectively. Accordingly, Kumar, defined management as the process through which planning, organizing, initiating and controlling of operations within business is carried out (2006). Similarly, management was defined as the process that deals with methods and techniques of efficiently and effectively using organization's resources to achieve set results (Ottih, 1995).

In furtherance, information refers to stream of data that have been processed to the form that it makes sense to its users. Succinctly put, information is organized data that has meaning. On the other hand, system is an assemblage of different but interrelated and interdependent parts that functions as a whole to achieve common interest (Gabriel, 2013); a set of elements joined together for a common objective (Kumar, 2006). Judging from these views, it is arguable that every system comprises parts, are interrelated and interconnected; becomes one entity and consequently pursues common goal.

Drawing from the foregoing, it seemingly appears that defining MIS is now a simple task, but that is not exactly so. Lucey (2005:11) averred that there is no universally accepted definition of MIS and those that exist reflects the emphasis and prejudices of the particular scholar that offers it. However, the subject has attracted the following definitions: an integrated system of providing information to support operations management and decision making functions in an organization (Ajayi and Omirin, 2007).

In their own views, MIS is basically concerned with the process of collecting, processing, storing and transmitting relevant information to support decision making in any organizations (Laudon and Laudon, 2007); a system to convert data from internal and external sources into information; and to communicate that information in an appropriate form to managers at all levels, in all functions to enable them make timely and effective decisions for planning, directing and controlling the activities for which they are responsible (Bee and Bee, 1999).

Another useful definition emanates from Walter J. Kennevan (See Ottih, 1995) who in an international conference defined MIS as:

………..an organized method of providing past, present and projection   Information relating to internal operations and external intelligence, It supports the planning, control and operational functions of an organization By furnishing uniform information in a proper time frame to assist the decision making process…..

Judging from these definitions, several points of convergence are inherent:-

- MIS involves data collection from any available source, processing and eventual usage.
- Such data are collected on past, present or expected future events from within and outside the organization.
- It is made available to those that require them at the right time and right place.
- It ultimately supports decision making process.

However, the success of MIS in any organization has a lot to do with its design. Developing an effective MIS involves the efforts of managers as well as those of specialists. The specialist is saddled with provision of technical expertise. More so, functional specialist must be involved to offer relevant ideas concerning their specialty. For example, an accountant should be part of accounting information systems, likewise marketers, and human resource experts and so on.

MIS development also requires knowledge from several disciplines. See figure 1. It draws from such wide and growing range of concepts and techniques to function properly. To have a good and useful MIS, adequate knowledge of the interactions and relationships among these fields is sine qua non. It is important to note that the MIS of any organization can be subdivided in sub systems that are the functional parts of the organization.
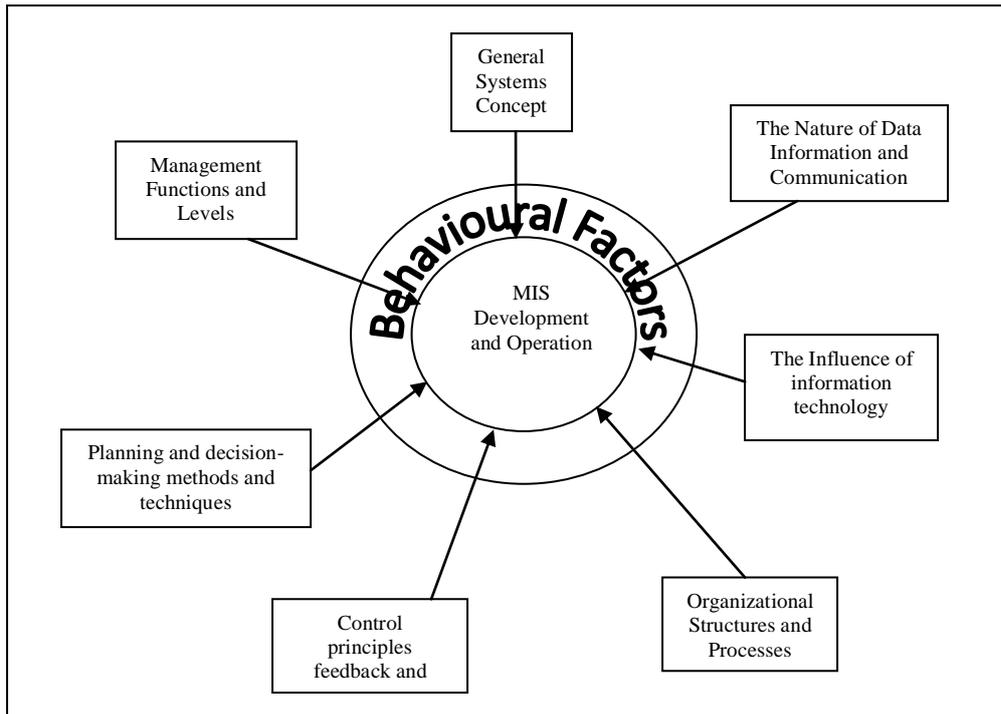
Figure 1:The Nature Of Data, Information Knowledge And Communications
Source: Adapted From Lucey, T (2005), Management Information Systems, London, D. P. Publication

2.1.Functional Aspects Of MIS

Most organizations are structured along functional lines or dimensions of the organization. These functional structures are usually apparent from an organizational chart, which fundamentally shows authorities and responsibilities of organizational members. Typical functional areas in most organizations are: Accounting, Finance, Marketing, Personnel, Research and Development, Operations/ Production and so on. The MIS of an organization can be divided along these lines to produce effective outcomes. We shall briefly discuss a few in the ensuing paragraphs.

- Accounting Management Information Systems-AMIS: this is a subset of an organization's MIS that provides accounting and financial information plus other information obtained in routine processing of accounting transactions- aggregate information relating to accounts payable, accounts receivable, payroll, and many other applications. This subsystem is used to produce external reports, decision support, planning and control, etcetera.
- Human Resources/Personnel Management Information Systems- HRMIS: the HRIS plays valuable roles in ensuring organizational success through effective handling of information relating to the personnel in the organization. Issues covered herein include: workforce analysis and planning, hiring, reports, training, job task assignments and many more. Outputs of the HRIS are in the forms of reports like human resources planning reports, job application reviews profiles, training and skills inventory reports, scheduling and job placement, wage and salary administration and others.
- Marketing Management Information Systems- MkMIS: this function supports managerial activities in product development, distribution, pricing decision, promotional effectiveness and sales forecasting. Within this function are marketing research, product development, promotion and advertisement.
- Manufacturing Management Information Systems: MfMIS- this is also known as production information systems. It deals with information relating to production process such as the monitoring and controlling of materials, products and services throughout the organization. We must not hesitate to remark that the effectiveness of any functional part of an organization or the entire organization at large depends largely on the quality of decisions made by every decision making members of the organization.

3.Decision - Making

Decision - making is the process by which organizational members choose specific course of action in response to threats and opportunities (George and Jones, 1996: 428). Good decision result in courses of actions that help an individual, group or organization to be effective, the opposite is its reverse. Every organization grows, prospers or fails as a result of decisions made by its members; and decision according to Daft (2001: 399) can be risky and uncertain without any success.

Simon (1984), a leading authority in management decision- making considers that decision making comprises four principal phases:

- Intelligence- searching the environment for conditions calling for decision making.

- Design- inventing, developing and analyzing possible courses of actions. This involves processes to understand the problem, to generate solutions and testing of solutions for feasibility.
- Choice- selecting an alternative or course of action from those variables.
- Review- assessing past choices. This model was later incorporated by George Huber into an expanded model of the entire problem-solving process (see figure 2).
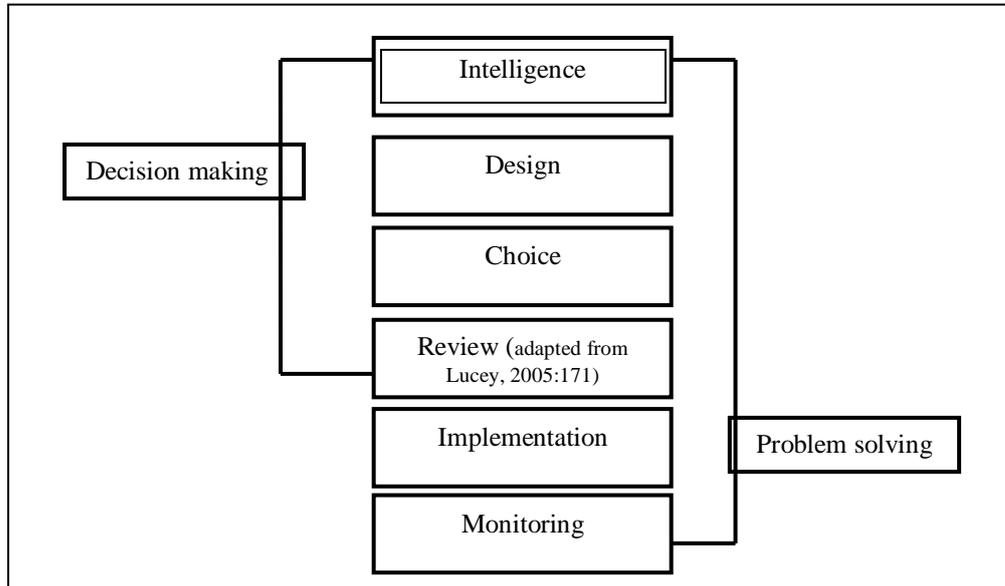

Figure 2
Source: Adapted From Ralph M. Stair And George W. Renolds (2003)
Principles Of Information Systems, Six Editions

3.1.Programmed Versus Non-Programmed Decisions

Simon (1984) classified decisions into two broad categories according to the extent that the process of decision-making can be pre-planned:

- Programmed Decision: these are decisions made using standard rules, procedures or quantitative methods. To make a programmed decision, the decision maker uses a performance program, a standard sequence of behavior that organizational members follow routinely whenever they encounter a particular type of problem or opportunity (George and Jones :429). For example, inventory control decisions, machine loading decisions, scheduling, etcetera.
- Non-programmed Decisions: this type if decision deals with unusual or exceptional situations. They are decisions made in response to novel problems and opportunities. This type of decision according to Lucey (2005: 171), is associated with high degree of uncertainty, cannot be delegated to low levels, may involve things, but always involves people. Examples: merger, acquisitions, launching of new product, personnel appointments, etcetera. Whether decision is of the programmed or non-programmed type, it depends hugely on inputs from management information systems.

Having good decision choices guarantees viable decision in organizations (Vital and Shivraj, 2008; and Jawadekar, 2006). Rhodes (2010) avers that MIS gives managers quick access to information. This can include interaction with other decision support systems, information inquiries, cross referencing of external information and potential data mining techniques. At other instances, MIS also is said to have revolutionized decision-making process through automated systems, through such systems, managers no longer rely on 24hour service from workers, instead, machines are to be programmed to do things, such as routine decisions, in place of humans (Jarboe, 2005).

In his thinking, Adebayo (2007) stressed that MIS provides information that is needed for better decision on issues affecting organizations regarding humans and material resources. Lucey (2005:179) argued MIS supplies information explores alternatives and provides support where the manager takes the decision or the MIS takes the decision itself, especially the routine operational decisions.

Accordingly, at operational levels, many but not all decisions are structured with known decision rules and objectives. Sometimes the decisions at such level are the semi-structured type. See figure 3, for decision-making at three levels of organization and how MIS assists at each level.

Management Level	Decision Type	Information System Support
Strategic Management	Unstructured	Executive information system
Tactical/Middle Management	Semi-structured	Expert systems, decision support systems
Operational/Lower Management	Structured	Transaction processing, automatic decision-making or accounting models

Table 1
Source: Lucey, T. (2005), Management Information Systems, London, D. P. Publication

Rhodes in lending voice to the discussion of how MIS affects decision-making, argued thus:

Management information system gives managers quick access to information. This can include interaction with other decision support systems, information inquiries, cross-referencing of external information and potential data mining techniques. These systems can also compare strategic goals with practical decisions, giving managers a sense of how their decisions fit organizational strategies (2010).

Management information systems is also renowned for vesting its operations on systematic methods, which ensures that decisions are made in a business are orderly and well-planned – in effect, encourages objectivity during decision-making (Jewadekan, 2006:363 – 370). Jahangir (2005) suggests that the principles, strategies and modes of operation in MIS can be intellectually used by macroeconomists to sieve between good and bad decisions. Accordingly, once such sieving is done, good decisions are encouraged, while the bad ones are jettisoned – eventually, such actions ensure positivity, in terms of decisions made by organizations, which essentially link up directly to improving the entire decision process.

4. Conclusion

Management information systems is no doubt an efficacious tool for modern business practitioners; its role in decision-making cannot be over emphasized because effective decision-making is ultimately a function of accurate, timely, relevant, complete and economical information, which MIS produces. Information resources have become of high demand in today organizations and MIS is the only option for the satisfaction of such demands.

Going by this status of MIS, business operators, as a matter of necessity need to embrace and emphasize its practice in the organization. This can be achieved through top management involvement and overall sensitization of every member of the organization to the fact that MIS has become an essential tool in their business practices. Every functional part of the organization must toe from the organization's total MIS and develop their functional management information systems. When this is painstakingly developed and managed, decision making in such organization would not only be faster or more accurate but would be in line with industry best practices and ultimately will result in organizational efficiency and effectiveness.

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