

Review on Management Information Systems (MIS) Control and its Role in Strategic Decision Making

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Abstract: *Management Information Systems (MIS) is the key factor to facilitate and achieve efficient decision making in an organization. This research explores the extent to which management information systems implemented to make successful decisions at BPO's companies. The research examined whether the selected BPO's companies of Madhya Pradesh vary as to the use of Management Information Systems leadership of decision making for strategic planning purposes. The research adapted the quantitative research design to examine two research hypotheses. A total of 160 forms were equally distributed to those who are working at different management levels at the selected organizations. The results of the research showed that MIS control was primarily used to enhance strategic planning in BPO's companies. The regression analysis revealed that Tactical planning is found to have no effect on Decision Making, while Strategic planning has a clear effect on the Decision Making Effectiveness in BPO's companies.*

Keywords: *Management Information Systems, Strategic Planning, Tactical Planning, Decision Making Process.*

1. INTRODUCTION

The role of the MIS in an organization can be compared to the role of heart in the body. The information is the blood and MIS is the heart. In the body the heart plays the role of supplying pure blood to all the elements of the body including the brain. The heart work faster and supplies more blood when needed. It regulates and controls the incoming impure blood, processed it and sends it to the destination in the quantity needed. It fulfils the needs of blood supply to human body in normal course and also in crisis.

The MIS plays exactly the same role in the organization. The system ensures that an appropriate data is collected from the various sources, processed and send further to all the needy destinations. The system is expected to fulfil the information needs of an individual, a group of individuals, the management functionaries: the managers and top management.

Impact of the Management Information System on Organisation

MIS plays a very important role in the organization; it creates an impact on the organization's functions, performance and productivity.

The impact of MIS on the functions is in its management with a good MIS supports the management of marketing, finance, production and personnel becomes more efficient. The tracking and monitoring of the functional targets becomes easy. The functional managers are informed about the progress, achievements and shortfalls in the activity and the targets. The manager is kept alert by providing certain information indicating and probable trends in the various aspects of business. This helps in forecasting and long-term perspective planning. The manager's attention is bought to a situation which is expected in nature, inducing him to take an action or a decision in the matter. Disciplined information reporting system creates structure database and a knowledge base for all the people in the organization. The information is

available in such a form that it can be used straight away by blending and analysis, saving the manager's valuable time.

The MIS creates another impact in the organization which relates to the understanding of the business itself. The MIS begins with the definition of data, entity and its attributes. It uses a dictionary of data, entity and attributes, respectively, designed for information generation in the organization. Since all the information systems use the dictionary, there is common understanding of terms and terminology in the organization bringing clarity in the communication and a similar understanding of an event in the organization.

Level of Decision making at different level of Organisation

A decision is choice out of several alternatives (options) made by the decision maker to achieve some objective s in a given situation. Business decisions are those, which are made in the process of conducting business to achieve its objective in a given environment. Managerial decision-making is a control point for every managerial activity may be planning, organizing, staffing, directing, controlling and communicating. Decision-making is the art of reasoned and judicious choice out of many alternatives. Once decision is taken, it implies commitment of resources.

The business managers have to take variety of decision. Some are routine and others are long-term implementation decision. Thus managerial decisions are grouped as:

- (a) Strategic decision
- (b) Tactical decision
- (c) Operation decision

2. REVIEW OF LITERATURE

There is a lot of research on the approaches, techniques and technologies for the design and development of MIS. However, there are a few articles that cover the impact of Management Information Systems on planning strategies and decision making. While there are no universally accepted definitions of MIS and those that exist in literatures are just prejudices of the researchers (Adeoti-Adekeye, 1997).

Lee, (2001) defined MIS as *"a system or process that provides information needed to manage organizations effectively"*.

Baskerville and Myers (2002) broadly define MIS as *"the development, use and application of information systems by individuals, organizations and society"*. In his study, Becta (2005) describes an information system as *"a system consisting of the network of all communication channels used within an organization"*. In their study, Laudon and Laudon (2003) have defined

MIS as *"the study of information systems focusing on their use in business and management"*. The abovementioned definitions showed that MIS has underlined the development, application and validation of relevant theories and models in attempts to encourage quality work in the area.

Referring to the literatures, the field of Management Information Systems (MIS) has had a variegated development in its relatively short life span. MIS has developed its own theme of research and studies (Baskerville and Myers, 2002).

Tracing previous literatures, we can report that during its first few decades, MIS Concentrated on the information in the context of: Electronic data processing which carries out transaction processing functions and records detailed factual data.

Management reporting systems which scrutinize the operational activities of an organization, providing summaries, information and feedback to management.

Only during the last two decades, the MIS field has shifted to the primary, considered the second type of communication, namely, instruction-based. This has become known as the domain of expert systems (Sasan Rahmatian, 1999). In attempts to review published studies on MIS and articles, Alavi and Carlson (1992) have identified popular research topics, the dominant research perspective, and the relationship between MIS research and practice. In contrast, Baskerville and Myers (2002) have examined the MIS field and found a constant shift of MIS research from a technical focus to a technology-organizational and management-social focus.

Skyrius (2001) underlines the decision maker's attitudes towards different factors influencing the quality of business decisions; these factors include information sources, analytical tools, and the role of information technologies.

Handzic (2001) also pays attention to the impact of information availability on people's ability to process and use information in short and long term planning and in decision making tasks. He revealed that the better the availability of information, the better the impact on both efficiency and accuracy of business decisions.

Liu and Young (2007) talk about key information models and their relationships in business decision support in three different scenarios. The authors proved that global businesses are in advance due to the Enterprise Applications System provided by modern IT tools such as Enterprise Resource Planning (ERP), Knowledge Management Systems (KMS) and Customer Relations Management (CRM) to enhance the efficiency and effectiveness of the Decision Making process.

In order to improve the financial organizational capability and enhance its level of competition in the market, financial

organizations should understand the dimensions of the Information Management, and clearly define and develop the resources in case of human, technological, and internal operations, among others, and manage them well across the organizational boundaries. However, establishing the link between Information System Management, planning and decision making is, at best, tricky.

3. RESEARCH METHODOLOGY

The present examination endeavours to clarify the connection between different components. Because of the idea of the ebb and flow study and its theory, the essential research reason for the momentum study is, in this manner, informative. Informative (or causal) clarifies the intricacy of the interrelated factors distinguished that were placed in the speculation and research.

By building up a few speculations, the investigation hence adjust the quantitative research configuration to all the more likely test those theories. Quantitative research uses study as the principle instrument to gather information.

Research questions and hypotheses

To accomplish the motivation behind the flow study, the accompanying examination questions have been detailed:

What exactly degree is MIS Control being used to help Strategic making arrangements for choices in BPO's organizations?

To respond to these inquiries, the present examination completes different theories that created from past writings and studies (Ajayi et. al, 2007). Figure 1 exhibits the proposed model and factors influencing the procedure of basic leadership.

Along these lines, we consider the speculation beneath:

Hypotheses -The following null hypothesis is formulated on the basis of affect of various factors on MIS application and its uses towards strategic decision taken by management in BPO's.

H₀₁ There is no significant effect of MIS Control for Management information system in achieving the necessary stated results in Strategic decisions.

Sampling Plan

The process that is involved in identifying and obtaining a sample are collectively known as the sampling plan. One of the important steps in planning the design is to identify the target population and select the sample if the census is not desired for some reason. Here, the determining the respondents who and how many people have to survey inspect. A sample is a part of the target population, carefully

selected to represent that population. We also use secondary data to provide preliminary empirical support.

Sample Profile and Size

An Individual, working with BPO industry and possess a managerial position. A part from this our sample profile includes those owned individual position in management of company and responsible for taken strategic decisions in organization.

After considering the important principals for finalizing the sample the researcher has finalized the number of sample 160 respondents. Our sample is taken from the major cities of Madhya Pradesh namely Bhopal, Jabalpur, Gwalior and Indore.

Sampling Design

We used Non-Probability sampling design, the reason being the unit or respondent in this research should possess managerial position or having position in Management of BPO Company where he or she is responsible in influencing the strategic decisions of the company. So the selection of respondent is based on judgment of the researcher to match the profile of respondents.

Sample Selection

Sample selection is a very important but sometimes underestimated part of a research study. Our sample selection is from Madhya Pradesh region only. We had taken into consideration four major cities of state namely Bhopal, Jabalpur, Gwalior and Indore. As these cities have the BPO's companies from where the respondents are sourced. Numbers of respondents are equally divided in to four cities Bhopal-40, Jabalpur- 40, Gwalior -40 and Indore-40 from varied BPO industries. The basic reason behind the sample selection from four major cities as the potential to get the respondents those are personally involved in strategic decisions policies in company.

Out of all the four cities the respondents fill data was received as Bhopal-37, Jabalpur-38, Indore-40 and Gwalior-36, a total 151 responses got after final collection out of 160.

Majorly the data was collected from the cities broadly from the category of below mentioned BPO's

- Customer Support Services
- Technical Support Services
- Tele Marketing Services
- Insurance Processing

Data Collection

In this study the tool used for data collection is Questionnaire. The structured questionnaire is consists of

statements related to various variable of Management Information system that are possess an important significance while strategic decisions are under consideration in BPO's .The responses of fundamental questions are based on 5 point lickert scale varies from Strongly agree to strongly disagree while there are some generalize questions also at end based on lickert scale.

4. ANALYSIS AND INTERPRETATION

After incorporating the various aspects of aspects of MIS and strategic decisions various part are formulated within the analysis and interpretation to described the relations between the various independent and dependent variables.

MIS Control

Under this variable there are five determinants as under:

- Regular feedbacks
- Circulation of latest MIS plans
- Validity check after completion
- Proper training
- Feedback on implementation

The descriptive statics of all the determinants are shown in table 1.

Table 4.2.8.1A R Squared Model Summary

| Model | R | R Square | Adjusted Square | R Std. Error of the Estimate |
|-------|-------------------|----------|-----------------|------------------------------|
| 1 | .892 ^a | .796 | .789 | .22993 |

a. Predictors: (Constant), Feedback on implementation, Regular feedbacks, Validity check after completion, Circulation of latest MIS plans, Proper training

The regression model with the value of t coefficients and P value .Here in this study for hypothesis testing the significance value is taken as .05.The values shown of all the determinants namely Feedback on implementation, Regular feedbacks, Validity check after completion, Circulation of latest MIS plans, Proper training are collectively significant. The value of R squared which indicates the relationship between the dependent variable and in various independents variable .A r squared value .875 or 87.5% of variation in 'Assigned responsibility' can be understand together with the Feedback on implementation, Regular feedbacks, Validity check after completion, Circulation of latest MIS plans, Proper training. Clearly from the value of R squared in considerable amount of percentage a determinants of

independent and dependent variable effect each other and only 12.5 % variation can be predicted by other factors.

H₀₁. "There is no significant affect of control in BPO's on strategic decisions taken by Management" is rejected".

Hence it is proved that, there is significant affect of control in BPO's on strategic decisions taken by Management.

5. CONCLUSION

After detailed analysis and interpretation and findings of study. The maximum managers have believed that *Management Information Systems (MIS) Control and Its Role In Strategic Decision Making* most crucial point that the Management of BPOs Organization should consider very seriously. Managers are accepted that transparency is highly required in MIS Control to effectively perform their role in strategic decision in BPO Organizations. Further another important consideration should be about the understanding of MIS, as most of the managers are not dealt with the changes in MIS Control properly. This results in improper understanding of MIS Control that leads to wrong prediction of future. So MIS Understanding also becomes a binding factor among the Managers to get into the MIS effectiveness.

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