

# Decision Support Framework in Managerial Learning Environment for Organization

M. Mazhar Manzoor, Nasar.A and A. Sattar

**Abstract**—In the open space of decision support system the mental impression of a manager's decision has been the subject of large importance than the ordinary famous one, when helped by decision support system. Much of this study is an attempt to realize the relation of decision support system usage and decision outcomes that governs the system. For example, several researchers have proposed so many different models to analyze the linkage between decision support system processes and results of decision making.

This study draws the important relation of manager's mental approach with the use of decision support system. The findings of this paper are theoretical attempts to provide Decision Support System (DSS) in a way to exhibit and promote the learning in semi structured area. The proposed model shows the points of one's learning improvements and maintains a theoretical approach in order to explore the DSS contribution in enhancing the decision forming and governing the system.

**Keywords**—Decision Support System , Learning Organization, .

## I. INTRODUCTION

**I**N the open space of decision support system, the mental impression of a manager's decision has been the subject of large importance than the ordinary famous one, when helped by decision support system. Much of this paper is an attempt to realize the relation of decision support system usage and decision outcomes that governs the system. For example, several researchers have proposed so many different models to analyze the linkage between decision support system processes and results of decision making .[1,2,3,4,5,6,7]

The supposition underlying this paper is that the DSS usage inclined to improve the decision steps.

These studies have assisted to our analysis of DSS roles. Also the literature reviews has suggested that the most sound results have found of decision making steps for problem solving methods and that very shortly have considered the valuable outcomes of DSS on problem solving methods and decision directions.

This flood of matter is basically the contribution towards DSS to inline a manager's mental models of business systems and helps improve the strength of making decision.

Engr. Muahammad Mazhar Manzoor is with the Federal Urdu University of Arts, Science and Technology , Karachi , Pakistan.( phone: +92-313-9234445; fax: +92-21-99244272; e-mail: mmazher@gmail.com).

Asim N. is doing his MPhil from KASBIT, Karachi, Pakistan (phone: 0092-334-413-7920; e-mail: aasimnasar@gmail.com).

Abdul Sattar is teaching in Department of Management Sciences at Balochistan University of Information Technology, Engineering and Management Sciences (BUIITEMS), Quetta, Pakistan. ( phone: +92 333 2029 579; email: abdul.sattar@buitms.edu.pk)

Before cognitive study have been yielded and have produced DSS importance in decision making steps. [8, 9]

The main theme addressed here in this paper is an attempt to provide a way to DSS in order to facilitate and enhance the managerial learning in semi structured area to sustain the business organization value. That in turn governs the structure organized. The rest of the paper is organized as follows.

In II we present a review of the literature related to DSS and learning ways, in III conceptual frameworks for managerial learning is develop, IV concludes finally by suggesting the way for individual learning with DSS that actually governs the system.

## II. LETERATURE REVIEW

In general an individual learning emerges from instructions and observations from environment and mental interaction between them.

### A. Managerial Learning Concepts

Managerial learning is conceptualized as adult learning and it has great impact in organization. It has been noticed that orientation of learning is moving from trainer (teacher) towards the individual who is actually motivated and curious to learn and adapt himself with the changing situations. [13]

Learning process is important to in his paper stated that "to really make effective use of experience to develop managerial talent, we need a much better understanding of the learning process as it plays out on line and of how to help people make the most of experiences they have" [10].

Individual learning of good managers is influenced by mental models providing the core directions for solving complex problems [7]

Similarly, the management has the capacity to control the formulation and implementation of information strategy [12]

The studies have shown that the managerial learning can be understood by the inductive and deductive acquisition of data and applying them on a man made models in skilled manner. As learning is basically lies in alteration of current knowledge by incorporating the new adaptation into the existing model.

The idea behind most studies is that whatever prior knowledge (experience, learning, belief, goal, reasoning, arguments, and familiarity) we have is operative (functioning) only if it has been brought together to the existing architecture in such a way that it can subsequently be enabled for providing help in understanding and suggesting near future motions. And it can discriminate the good actions from the bad ones.

### B. Managerial learning and DSS

In this paper managerial learning is conceptualized as small scale model of external reality, the process by which managers acquire various alternatives, conclude which is the best of them, react to future situations, and employ the knowledge of past occurrences in dealing present and upcoming and in every manner to greet in much rigorous, secure and more adequate manner.

The essence of premise is that the manager's mental models are naturally upgrade by a small change in learning.

Decision support structure secures in large number of researchers inspections is used for gaining the evidences affiliated with business rule. [13]

A large number of researchers have proved DSS can provoke the managerial learning. In short the centre of interest in research combined with managerial learning and DSS is system capability that gives back the image of different cognitive work.

This paper proposes a conceptual framework for checking the hold of DSS may boost the managerial learning that actually dominates the system.

### III. FINDINGS ON DSS ACTUATION

The pattern shown below describes the notional framework in DSS atmosphere for testing the managerial learning. The work enclosed in pattern propound that distinctive set of individual's input variables, evolution factor and oriental variables influence the various stimulus mediums, by which a decision taker (thinker) elect, systemize and synthesize the novel knowledge. These cognitive processes, in turn, simulate the reorganization of thinker's pattern of business in such a freeway to bring up his/her intellect of an explicit decision process. As the comprehension of this intellect strikes once, the work enclosed grips that there is a chance of efficient (worthy) decision. This in turn actually is producing the elegancy to workers that may cause the better governance of system's structure. Detailed description of the work is shown figure 1.



Fig: 1. DSS Structure

There is a mass of theory on one's dissimilarities among consumers of information technology. Our framework focuses primarily on concepts and confirmation of evolution factor.

Initially the learning aspects we have enclosed in our frameworks are learning dimensions, situations, cognitive

ways and business class are all associated to the attainment of focus of business beneficial styles.

There indeed we have two types of variables: qualitative & quantitative.

*Distinctive Set of Input Variables* are qualitative set of variables and quality comes from experience, learning from mistakes & in one line quality comes when we will have win-win situation type of variables, where we do not have any chance of even one loose-loose situation even. Distinctive variables are in real the principles of manager's experiences with which managers are strongly bonded.

*Oriental variables* on the other hand we have quantitative fundamentals, which comprised of time dependent and figure-dependent variables. Time dependent variables are incorporated with the time spending on a single assignment in an organization and are processed in different ways of administration. This approach underlines the addiction on conditional circumstances to affirm a particular strategy within an organization.

*Evolution factor* define the idealized interaction and composition in relation with classis binding of both. Also provides the basic fundamentals of employment of data and the foundation for DSS.

The oriental and individual variables come together in contact at many times to recreate the learning ways for a more clear vision. The element of true performance generates by the influence of both. Additionally there is a discrepancy in manner of powerful and fragile oriental variables. Powerful variables are those from everyone can suppose a proper definite response in a limited path. Conversely, the fragile or vague variables perform independently in a manner of their individual variation. This may improve the managerial learning.

From learning point of view the vision of evolution factor is no-doubt very valuable.

A core idea underlying any change of observation is that learning does not happen in emptiness, but it arises from the changing activities of changing atmosphere. It includes generating new guidance; problems come into task & worker and a high class of management acts. In this individual actually concerned for standardized data or facts and requirements.

*Stimulus process* ensures that the collected data is utilized in problem solving. Stimulus depends on multiple cognitive functions which permit one's dedicated operations, updating and description of affiliated facts integrated in existent animated pattern. It provides a bridge between DSS application and to overall system directions. A properly formulated stimulus medium can empower more processes that furnish competitive benefit. In addition we have also found that stimulus functions govern the acquirments and translate the knowledge. (Declarative, Procedural)

Summing-up the especial assigns by the stimulus functions to resultantly retain in a broad horizon of rationalizing

procedures from upgrading the problem solving expertise to invention of added intelligence. This indicates the leading points in traversing to improve the efficacy of managerial decision.

*Efficacy of decision:* Manager's knowledge, skills and abilities in relation with the DSS can be more effective and potential dimension that gives strength to the decision while stimulus factor behind this play an important role to enhance the potentials of DSS framework.

This paper assumes that the efficacy of decision forming points to recognize what are the most relevant evolution factors and what should be done and how decision dimensions are chosen in consideration of quality measure (complexity, number of tasks, time, reasoning steps, possible solution, etc). In recognizing the various strategies of DSS it is significant to have a contiguous view at declaring the attributes of DSS. It shows that the devotion is on proportion of approach presents to managers. More specifically we can say that the employment of DSS may direct to modification of manager's mental standard of business atmosphere which reflects the empowered decisions. By considering this all the sense of strengthening of a manager's decision can be extensively proliferated.

*Generating grace to workers:* The interconnection between person learning and public learning is important when considering the knowledge in connection with build-up supportive systems [14].

Managers' stimulation with the support of DSS framework is the sign that may lift the organizational worth in a strategic way and helpful for the betterment of singular and a group of cluster as well. Style of this learning for managers and other workers raise the gregarious context that encloses the fundamental learning exercises.

*Better governance of system:* These above areas are interrelated. Satisfaction ground of Manager's with DSS support framework provisionally creates the value and esteem for organization as they are primarily connected with the system's functions and their manipulation that they bring out for the organization. The interest of our paper raises the DSS governance (management). This shows the enhancement of decision making in business atmosphere that truly directs to better governance of system. The consequences of better governance are connected to business dimensions. These dimensions entail enhanced intercommunication, enhanced characteristics, suppleness to meet the environmental alteration, enhanced consents of DSS variables and producing more advantages to managers and other individuals.

These multiple strategies can actually re-shape the existing supportive systems and deliver set out input to DSS for managerial decisions.

## VI. CONCLUSION

The goal of this study was to analyze closely the performance of DSS causing the strong learning in business environment that may enhance the governance of system.

The paper has shown that DSS is a tool that provides the ease in managerial learning through quantitative and qualitative data facets. The idea mentioned in this paper has lifted the issue that the current research has not been contemplated the execution steps in all its angles. But in our suggested pattern we have tried to put a framework that will help directing these issues. We suggested that the expanded usage of DSS may actually enhance the learning directions.

Moreover we suggested containing the distinctive variables with oriental variable with a closer look of variables that are commonly used for business purpose. The findings of this theoretical research without any doubt show that growing of business and better governance of an organization is dominantly related to DSS directions.

The theoretical model shown for decision support is a good framework in order to maintain the culture of governance intensions. This model could be helpful in trying to avoid the failure attempts for strong learning and better governance. The correlation between DSS and business atmosphere seems to be the suitable way of better governance. One limitation of this research was the support of only business information in DSS for better governance is only a single way of learning potential. Learning could be in several ways which may direct towards better governance of business and satisfaction of workers. A second limitation was the only focus of better governance of system of organization.

## REFERENCES

- [1] Alavi, M. and Joachimsthaler, E. A. Revisiting DSS implementation research: A meta-analysis of the literature and suggestions for researchers. *MIS Quarterly*, 16, 2 1992, 95-116.
- [2] Ggslar, M. D.; Green, G. I.; and Hughes, T. H. Decision support systems: An empirical assessment for decision making. *Decision Sciences*, 17, 4 1986, 79-91.
- [3] Guimaraes, T.; Igarria, M.; and Lu, M. The determinants of DSS success: An integrated model. *Decision Sciences*, 23, 1992, 409-430.
- [4] Benbasat, I., and Nault, B. R. An evaluation of empirical research in managerial support systems. *Decision Support Systems*, 6, 3 1990, 203-226.
- [5] Support system effectiveness: A review and an empirical test. *Management science*, 34, 2 1988, 139-159.
- [6] Udo, G. Rethinking the effectiveness measures of decision support systems, *information & Management*, 22, 1992, 123-135.
- [7] Martin Santana. Managerial learning : a neglected dimension in decision support systems
- [8] Elam, I. J., and Mead, M. Can software influence creativity? *Information systems Research*, 1,1, 1990, 1-22.
- [9] Todd, P. and Benbasat, I. An experimental investigation of the impact of computer based decision aids on decision making strategies. *Information Systems Research*, 2, 2, 1991, 87-115.
- [10] McCall, M.W. Leadership development through experience. *Academy of Management Executive*, 18: 2004, 127-130.
- [11] Managerial learning from on-the-job experiences: An integrative framework to guide future research Karen Wouters 1 Dirk Buyens 2 November 2006 2006/421
- [12] Decision Support Framework for the Implementation of IT-Governance Fink, K., Ploder, C.; University of Innsbruck, Information Systems Kerstin.Fink@uibk.ac.at, Christian.Ploder@uibk.ac.at
- [13] A decision making methodology in support of the business rules, Mark Feblowitz, Chris Wild\*, Daniela Rosca\*, Sol Greenspant

- [14] Towards Technology for Learning in a Developing World Meurig  
Beynon Computer Science, University of Warwick, Coventry, UK  
wmb@dcs.warwick.ac.uk