

# Role of Management Information Systems in Education Sector

**Sunil Kumar Verma**

Maa Vindhyavashini College of Education, Jharkhand, INDIA  
verma.565sunil@gmail.com

## I. Abstract

The role of Information, Communication and Technology (ICT), and Management Information Systems in the success of different professional sectors has been undebatable. The present content represents the outcome of a study about their role in education sector, being it among the most spread and important sector of profession in India and globe. Significance of Management Information Systems in instructive management for the staff of Educational Institutions have been studied and presented in the present context.

**Keywords:** Management Information System, Education

## II. INTRODUCTION

The requirement for quick and proficient information parade has been the assumption for most instructive foundations across many non-industrial nations. This assumption has expanded even the more in the new thousand years with the presentation of Information, Communication and Technology (ICT), and the wide spread of web applications. The connection between's productive information preparing and quicker dynamic has existed since days of yore and with the presentation of data Technology, it has ended up being undeniable that the relationship ought to be reinforced and the advantages saddled to guarantee progress in every single instructive foundation. The field of management data frameworks (MIS) has had a variegated improvement in its moderately short life expectancy. It's anything but a posterity of tasks examination and choice sciences in the last part of the 1950s. In years and years, it announced its autonomy and turned into a different field. In its amazing development since the 1970s, it has gone through various exciting bends in the road that have removed it farther and farther from frameworks thinking somely, while protecting the thought of frameworks at its center otherly (Rahmatian, 2016). Instructive heads have been delayed to execute automated information preparing Perhaps they neglected to comprehend data frameworks or potentially frameworks arranging were ignored. All the more as of late, endeavors have been made to adjust the arrangement of decentralization to the assortment and examination of instructive information at all degrees of training.

Inside this cycle, Management Information Systems is being utilized to assist with building the functional plans and foster financial plans for execution. By giving solid and precise information it is expected that the arrangement of Management Information System in instructive management will assume a significant part in the decentralization cycle by assisting with guaranteeing that schooling arrangement turns out to be more productive and receptive to nearby needs. Management data frameworks are unmistakable from ordinary data frameworks in that they are utilized



to dissect other data frameworks applied in functional exercises in the association. Management Information Systems is likewise supporting changes that are happening in different pieces of the schooling framework, particularly in non-formal instruction and tertiary training. Non-formal training is one of the means by which Ghana can gain ground towards accomplishing Millennium Development Goals. Consequently the Non-formal Education Division (NFED) has painstakingly evolved frameworks and methods to assist with observing advancement towards predefined targets and furthermore to compensate suppliers who accomplish such targets. The National Council for Tertiary Education (NCTE) additionally gathers, groups and examinations information from colleges and polytechnics, which is all used to ascertain financing levels for the area (UNESCO, 2003). The motivation behind this paper is to dissect the exceptional job management data framework plays in Education management zeroing in fundamentally on tertiary foundations and the job they play in planning understudies for the work market.

### **III. THEORETICAL FRAMEWORKS**

The theoretical framework of a study is a structure that can hold or support a theory of a research work. It presents the theory which explains why the problem under study exists (R.E.Khan, 2016). Thus, the theoretical framework is but a theory that serves as a basis for conducting research.

#### **A. Task-Technology Theory**

Undertaking innovation fit (TTF) hypothesis holds that data Technology (IT) is bound to emphatically affect singular execution and be utilized if the abilities of the IT match the assignments that the client should perform Goodhue and Thompson (2016) fostered a proportion of undertaking innovation fit that comprises of 8 elements: quality, approval, and similarity, usability/preparing, creation practicality, frameworks dependability, and relationship with clients. Each factor is estimated utilizing somewhere in the range of two and ten inquiries with reactions on a seven point scale going from emphatically differ to firmly concur. Goodhue and Thompson (2016) discovered the TTF measure, related to usage, to be a huge indicator of client reports of further developed occupation execution and adequacy that was inferable from their utilization of the framework being scrutinized.

#### **B. Socio-Technical Theory**

Socio-specialized hypothesis underlines the requirement for consistency among autonomous subsystems for the bigger framework to accomplish ideal execution (Avgerou et al, 2004). The specialized subsystem involves the gadgets, devices and procedures expected to change contributions to yields in a manner which upgrades the financial exhibition of the association. The social framework includes the representatives (at all levels) and the information, abilities, mentalities, qualities and necessities they bring to the workplace just as the prize framework and authority structures that exist in the association. The foundation of the socio-specialized methodology was that, the fit was accomplished by a plan cycle focusing on the joint enhancement of the subsystems: any hierarchical frameworks will amplify execution just if the interdependency of these subsystems is expressly perceived. Thus any plan or overhaul should search out the effect every subsystem has on the other and configuration should mean to accomplish unrivaled outcomes by guaranteeing that every one of the subsystems are working in agreement.



### C. Cognitive Fit Theory

The theory proposes that the correspondence between task and information presentation format leads to superior task performance for individual user (Iris Vessey, 1991). According to Vessey (1991) "matching representation to tasks leads to the use of similar problem-solving processes, and hence the formulation of a consistent mental representation. There will be no need to transform the mental representation to extract information from the problem representation and to solve the problem. Hence, problem solving with cognitive fit leads to effective and efficient problem-solving performance."

### D. Theory of Competitive Strategy

Michael Porter's (1979) system utilizes ideas created in miniature financial matters to infer 5 powers that decide the appeal of a market. They comprise of those powers near an organization that influence its capacity to serve its clients and make a benefit. An adjustment of any of the powers requires an organization to re-evaluate its commercial center. The five powers are:

- The bartering force of clients
- The bartering force of providers
- The danger of new participants
- The danger of substitute items
- The force of serious contention

Consequently, an Educational Institution can accomplish a more elevated level of effectiveness in its cycles and methods and increment its net revenue where essential if it has the fitting Management data frameworks that is adjusted to the Undertakings performed by the workers, and has prepared ICT specialists to support the Information frameworks.

The social and specialized subsystems are appropriately adjusted through standard hands on preparing and the data innovation accessible matches the undertakings allotted to the authoritative staff. The show arrangement of errands are not changed unpredictably to guarantee compelling and productive critical thinking execution.

## IV. Management Information System (MIS)

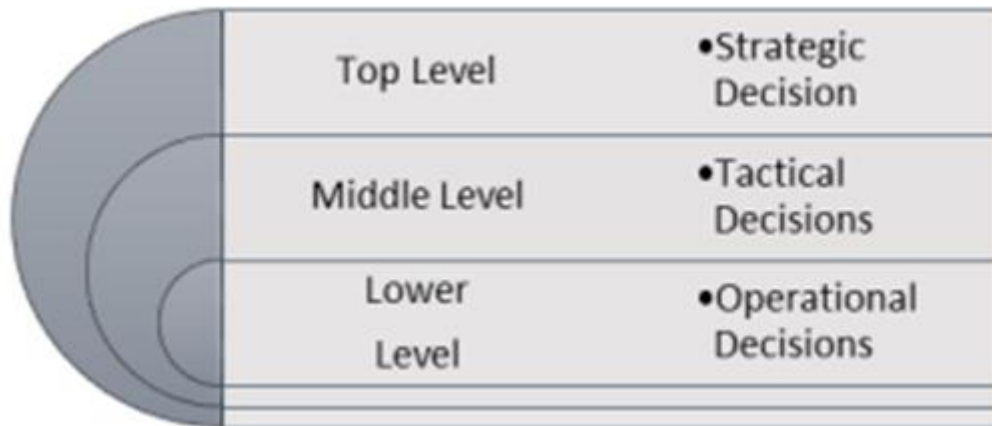
Right dynamic is conceivable with the proficient usage of data. Taking into account the huge information and data accessible to the chiefs, the dynamic cycle turns out to be exceptionally troublesome. Data needed for dynamic ought to be effectively accessible [4]. Assortment of information, its change to the data, appropriate capacity of data, recovery of data and compelling use of data need Management Information System prominently known as MIS. Management Information System is a PC based framework. It is a solid instruments accessible to administrators for arranging, coordinating, executing, observing, control and assessment of their tasks effectively. MIS Facilitates successful correspondence. MIS comprises of three fundamental segments: Management, Information and the System. Coordinated utilization of these three segments empowers clearness in understanding the issues in question, effect of every part on other apparently free sources of info however interconnected with one another. The choices taken in this manner is proper with regards to the business prerequisites. MIS empowers to embrace multi-disciplinary management approach considering every one of the viewpoints identifying with functional, monetary, materials, social, hierarchical practices and arrangements; and PC related issues.



Association works in comprehensive way with the assistance of MIS instead of in various sections. Choices in various sections without adopting a comprehensive strategy have more noteworthy odds of disappointment. There is gigantic avoidable waste in usage of hierarchical assets.

#### A. MIS supports organizational systems

Organizational structure basically can be divided in three layers of hierarchy: top management level, middle management level and lower management level (Fig. 2). Each level takes decisions according to their roles.



**Figure 1: Decision areas and management levels**

The lower level administrators are engaged with functional choices, center level managers" center around the strategic choices and high level supervisors focus on essential choices. A large portion of the normal exercises are arranged, executed and overseen by lower level directors for instance arranging, planning and guaranteeing that every one of the plans are carried out as chosen. Center level administrators invest somewhat less energy on the normal arranging exercises and spotlight more on strategic choices, for example, critical thinking, hole examination, execution evaluation and publicizing. The part of top directors is totally different than the lower level and center level supervisors.

## V. RESEARCH METHODOLOGY

The research adopted the quantitative approached in data collection because it presents the researchers with numerous advantages such as looking at the relationships between variables and establishing the cause and effect in highly controlled circumstances. Also this method often reduces and restructures a complex problem to a limited number of variables.

#### A. Methods

Two (2) fundamental testing strategies were utilized; the defined examining and the purposive inspecting. The separated testing was utilized to bunch the example size into 2 fundamental classes; to be specific: Administrative Staff and Management. These groupings will empower the information needed from every layer to be gathered and examined. Purposive testing was then utilized to gather information from respondents from the establishments. The two inspecting strategies were utilized since they empowered the specialist to gather information applicable to the

examination and to lessen rate mistakes during information investigation. An example of 100 respondents was purposively picked dependent on their consistent admittance to information inside the foundation. A breakdown of the example size is as per the following; three (3) Heads of Department of Admissions, Student Records and Examinations with their individual sectional heads and clerical specialists were met. Five (3) individuals from staff from the Central Accounts office, three (3) from the Audit Department, and three (3) from the understudies Accounts Department. The Heads of the Human Resource, General Administration, Planning and the Development Departments along with their sectional heads, the secretaries and agents were chosen. The all out number of people browsed the three (3) Faculties were 20; including Deans, School Administrative Officers, Accountants and Heads of Departments were picked to answer the surveys. Four (4) management staff with their individual sectional heads and agents was chosen. Staff and Departments Examinations Officers also were met since they work on assessment results.

### **B. Data Source**

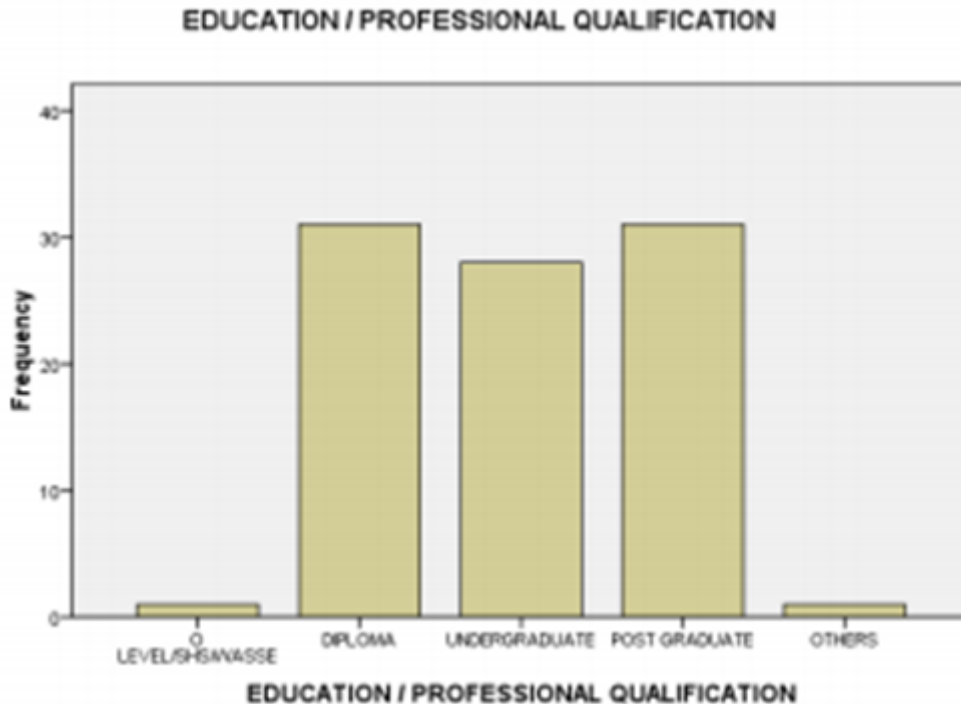
Primary data was collected from the population of the study. The population of the study comprise of the management and administrative staff of Polytechnic and other professional institutions in the vicinity. This comprises individuals who participate in the day-to-day running of the institution. Management staff includes the rector, vice-rector, registrar and the finance officer. The administrative staff includes the individuals whose activities ensure that there is a constant flow of data either from management to staff or from staff to management.

## **VI. DATA ANALYSIS AND RESULTS**

### **A. Educational or Professional Qualification of Respondents**

As regard to educational / professional qualification only one respondent has a qualification below the diploma level. Considering that undergraduates and postgraduates respondents alone constitute 64.1% of total respondents could mean a well-informed people making up the crux of the research.





**Figure 2: Education / Professional Qualification**

## VII. CONCLUSION

The investigation of the significance of Management Information Systems in instructive management isn't generally thought to be in most tertiary establishments basically in light of the fact that, it is expected that with the right Information and Communication Technologies set up, every one of the issues that accompany data stream will be settled. Notwithstanding, this investigation has shown that MIS isn't only the establishment of PC frameworks, its important programs and frills; however, the ability of management to buy the right situation and programs, the acknowledgment of the chairmen to utilize the framework and the accessibility of skilled ICT staff to help the framework.

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