The Moderating Effect of Job Satisfaction on the Relationship of MIS and School Performance in Pakistan

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Abstract:
This study intends to verify the moderating effect of job satisfaction on the relationship between Management information systems (MIS) and school performance in Pakistan. In the previous studies review of the theories explaining the role of Management information systems (MIS) on boosting corporate performance were conducted. Past research has shown that the Management information system (MIS) has provided facts that are related to information on the effects of several factors on performance, output rate on workers. This paper will also look at the meaning and benefits of a management information system. The types of management information system will also be discussed in this research. This study will further reveal more information on the MIS ability to bring about a higher degree of performance in schools. It will also suggest some features of MIS with a direct impact on schools, job satisfaction, and performance in Pakistan.

Keywords: Management information system, job satisfaction, school performance, moderating effect

Introduction

Job satisfaction and performance in education are generally based on information established at school as data generated on individual information with regards to the activities of the teachers and students that are stored in a specific IT system. The management information system is used to disseminate knowledge, examine, organize, collect, and store the output of the school. This will assist the school to back up facts and figures of students and teachers’ outputs. Schools in Pakistan need to adopt the MIS and other techniques with the aim of developing the schools’ decision-making processes, improve the students’ results and teachers’ output (AlMaryani and Sadik, 2012). In other words, MIS is used to enhance the effectiveness of school activities and performance. It is worthy of note that MIS helps to improve the performance of the students and the teachers if well implemented (Ahmad, 2016 & Mehrgan, 2015). According to Chenhall 2003, many studies have shown that MIS is used by schools management and teachers to improve the performance of students and the development of the schools. Furthermore, MIS is used to drastically enhance the schools’ decisions leading to improvement in the performance of the students and teachers. In other words, schools that rate their MIS high will do so to a large extent in order to attain and enhance the total ultimate goal of the school. Empirical studies revealed different results on the relationship between performance and management information system with the analysis on the effect of certain management method. Studies have also shown that many organizations implemented MIS as a tool for making the decision to achieve high-level performance. Further investigation to examine the relationship between MIS and performance were proposed by early researchers in the field.

This study tries to answer the question of the moderating effect of job satisfaction on the relationship between MIS and school performance in Pakistan. This will make it clearer whether MIS if well-implemented influence school performance. The question was tackled by using present theories to make clear the connection between job satisfaction school performance through MIS. The existing methods were used to explain the relationship that exists among the variables. This study adopted the previous researches following the approach by considering the MIS is job satisfactory when the schools’ management allowed the authorities to make better decisions and improve the school performance.

2. MIS in School and its benefits

http://www.ijmsbr.com
According to Leonardi and Bailey (2008) MIS is a formal way of presenting schools’ decision making with suitable, timely, and necessary information about the affairs of the school. MIS in school has to do with giving information on the future, present, and past activities and on related developments inside and outside the school organization (Aldarbesti & Saxena, 2014). Management information system can also be regarded as an instrument for collecting, organizing and integrating information about the students and teachers based on related data, transforming the date into perfect information. The major aim of MIS in schools is to according to Ahmad (2016) helps to provide the relevant information to the public and school authorities at the stipulated time. The concept of MIS in schools is crucial to the use of computer, and it helps counteract the productive use of the computer and inefficient development.

MIS should be a system that is assigned the information of the school administration for the benefits of the teachers and students to enhance job satisfaction and performance of the students and not to people who are not part of the managerial staff (Aldarbesti & Saxena, 2014). In other words, the collection of information of the school workers and students follows a well-structured format, a set of rules, and routine in a systematic manner (Shurbagi & Zahari (2014). Therefore, MIS in this context is a formal information network in the administration of the school in Pakistan. The information produced by MIS will help the school authority to control their decisions and planning (Ahmad, 2016). Therefore, MIS is a system used for decision making, control, coordinate, analyze, and visualize information about the school. Wu and Lee (2007) are in support that for education to flourish in Pakistan, schools’ administrators should operate MIS to check and balance the activities of the teachers and students the knowledge passed on to them for high-quality education with improvement in performance. It was added that the operation of MIS must be protected by standard planning, aims, and objectives of the school and the outcome of the system which could be set at a five-year period.

According to Shurbagi and Zahari (2014), school administration must monitor and control the operations in accordance to the aims and objectives of the school and the target plan for development and achievement of the process to improve lapses and revise any unwanted situation. However, the school authority should determine the outcome of the system and the impacts on output and decided how to control any unforeseen circumstances (Ahmad, 2016; Leonardi and Bailey, 2008). The system functions in such a way that it helps the Ministry of Education or school proprietors to monitor the operation of the school by providing information to the teachers and administrators on areas of improvement and progress of the students’ performance. Shurbagi and Zahari (2014) MIS provides facts and information to assist in the operation of any organization but has no significance in managerial decision making, the system in school administration only provides information on students’ performance and contributions to society.

Variety of Management Information System

MIS in the school system provides the opportunity for competition among schools when it supports in achieving the aims and objectives of the school. According to Jorgenson, 1989 DSS is one of the systems used mostly for semi-structured and unstructured decision and problems while Executive information systems (EIS) is a tool that reports quick access to the summarized reports coming from departments and all school levels in relation to human resources, operations, and account.

However, the general types of information systems in school can be classified into a database management system (DBMS) which is a combination of software and data that makes it possible to organize and analyze data. DBMS software is typically not designed to work with a specific organization or a specific type of analysis such as Transaction Processing System (TPS) focusing on students records, school payment System, enrolment system, Management Information System (MIS), Decision Support System (DSS), and Expert Systems (ES) and Artificial Intelligence (AI). In essence, if MIS is well applicable in Pakistan education, it is going to influence the outcome of education in the nation.

Therefore, the difference between data, information and decision process (DIDP) in education is not well known to school administrators in the nation. The application of MIS in school helps to take care of raw
scores, figures, objects and a host of others when processed are converted into information which is used to make decisions that affect the school development and progress. If well held to in Pakistan will boost the growth of education and the output of the institutions. It is also of importance to note that schools have any data which are not well processed to provide relevant information for better decision making. For any institution to take the right decision, it needs information like the number of students seeking admission yearly, the number of students graduating every year, the performance of students in every discipline, the number of courses offered in the institution, the number of other schools offering similar courses, the job opportunity and demand of the public for the students who passed out of the institution as well as the number of students seeking admission outside the country and why. These and other information provide the school authorities to design their courses to meet the demand of the public (Aldarbesti & Saxena, 2014)

The Types of School Information

According to Aldarbesti and Saxena (2014) presenting the views of Harsh, Connor, and Schwab on the types of information. They suggested the following 4 varieties of school information:

Descriptive Information;
Diagnostic Information;
Predictive Information;
Prescriptive Information.

These are presented in the below model

**Figure:** showing the four categories of school information

**Descriptive information**

This aspect of information has to do with the beginning of the establishment and building a business and is the first in the classification of information. It is the base for other information. Descriptive information as an education system is a concern with the number of students enrolled in a school, the courses and disciplines that are run in a school, the placement process in vogue and its success, the marketing strategy adopted and its impact on the enrollment of students, and the recognition of courses by the public.

**Diagnostic information**

Diagnostic information, on the other hand, provides insight into the problems faced by schools, what are the reasons for the problems faced by the school and what has been done to alleviate the problems? What should
be done about the problems? These and some other problems are faced and dealt with by diagnostic information where the school or institution are faced with low expectation of students’ registration or high registration of students and why, knowing the most popular courses taking by students, finding the reasons why more students are rushing the institution for admission, it seeks to find out why students who are registered in the school or institution are moving to other schools or institution, is the charges of the institution very high compared to other schools, and is the advertisement method yield better result. Education planners and regulators use diagnostic information to design the aims and standard for education with the view to use the information for necessary actions and plans, while the gap is analyzed to find out problem areas and areas of opportunities

Predictive information
What if.....? question is handled by predictive information to provide the group of information the analyzing of the future techniques for consideration and adoption for the desirable outputs. The predictive information is also very important for forecasting, planning strategies for future, and providing a resource for the institution in mobilizing in future years and the marketing strategies to be practiced; it gives budgeting strategies, simulation methods, and other tools for management to be adopted by the institutions for extensive prediction of information.

Prescriptive information
The predictive information in education takes care of what to be done and what should be done by schools or institutions. The prescriptive information is responsible for the sources or data for analysis. The goals and values set for the institutions are the output of the predictive information. In other words, offering integrated courses in schools or institutions helps the students ready and steady for the future courses that they face in higher institutions. Such students have the opportunity to be admitted into higher the same institutes due to the acquired knowledge of the norms and standard of the institute. Such institutions believe that students will perform wonderfully well in school programmes. The students who went to schools or institutions with these facilities are exposed to world-class universities with a quality education that improves their interactions worldwide. According to Wong et al. (2009) school information should not be based on human power by writing down information in black and white but should be carried arranged and managed by computer. Therefore, the Education Management Information System (EMIS) is a major term and a necessity in Pakistan in relation to understanding the issues of benefits.

In Pakistan, The Education Management Information System was particularly established to gather information by using census form to get facts on school facilities, students’ performance, enrolment, quality of teachers, and courses in the faculties and departments. The reason for this is to give an adequate guide to the level of sourcing reports and planning for the nation’s education. Unfortunately, in Pakistan, EMIS is not successful in planning education in the nation because it has no base-line information, the several layers of the government activities made it impossible to function well, the poor planning process of education in Pakistan makes collecting and collating data of the education system difficult. In other words, the EMIS is not supported in the planning process of education(Ahmad, 2016). The inadequate knowledge and poor reliability of data affect the functions of EMIS in the country. The EMIS suffered due to difficulties in the collection of the survey data, poor commitment from the stakeholders as well as lack of capacity. Another important reason for the failure of EMIS was the lack of interest taken by the federal government and poor coordination between state agencies. It was observed that there was a resources crunch in collecting the data, analyzing the data collected and transforming the data into policies and strategies.

In the resent time human manpower is no longer used as a means of collecting and collating information instead computer is used to process school data. A computer system usually arranged and manage education information compare to the human power used to write down information in black and white. Therefore the following responsibilities are shared among the level of the management hierarchy in the school organization. Most important issues relating to the kind of information needed for decision making and implementing it are spelled out in the school chart. Following the above mentioned types of school information: the descriptive information which is the operational level deals with policy making and...
strategic decisions deriving information from the schools’ daily schedule of lectures, lecturers/teachers absence from lectures or school, reschedule of teachers or lecturers lecture time or alternative arrangement; the second level has to do with the diagnostic information which is the middle level of operation has responsibility for tactical decisions that are concerned with Why lectures do not star in time?, Why lecturers come to class late?, Why students come to school or classroom late?, and Why the classroom projector or teaching instrument of teaching is not working? Furthermore, the predictive information comprises of the senior middle workers who take decision on tactics on how to ensure that classes start at the scheduled time, how to improve up-time of projectors and mic systems classroom for effective teaching and learning; and finally, the prescriptive information handled by the top level of any organization taking the strategic decisions on how the administrative staff arranges the lecture rooms and taking care of the biometric system for attendance.

Therefore, the school information according to Bello-Orgaz and Camacho (2016) is gathered in mixed and in order easily recognized by the computer system to determine the detail and type of activities of the school to determine what to use. The school information is an important aspect for running the school and the operation of the teachers and departments (Baskarada, & Koronios, 2013). Melnvk and Andersen (2014) also affirmed that the aim of MIS be focused on enhancing and improving the performance of the organization and helping schools and other firms to take the right decisions to improve performance. Also, according to Slotegraaf and Pauwels, 2008 and Schaeffer and Dossi (2014) MIS should help to strategize flexibility in decision making and cost for better performance. For instance, the school decision makers should apply MIS to increase school enrolment, students’ performance, fees charging and competition with other schools considering the input and output of the school.

Conclusion

MIS is very important in the development of education and business looking at the benefits that come out of it. It helps to maintain competition among schools. MIS is associated with marking, method, computer, and man for collecting information from the external and internal sources and analysis of the information to enhance the process of making a decision of the school or education. Investing in MIS to researchers is a way of trying to have an advantage over other competing organizations and will enhance the performance of the teachers and students.

References


