



Management Information system Impact on satisfying Indian B-Schools students

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Abstract

"Today, Management information systems are an integral part of every institution and have a positive impact on customer satisfaction." As business schools are "student-centric", their satisfaction becomes very important for colleges. Management information systems are an added value and can help business schools to offer simple and effective services to their students, which allows for simpler communication, allows staff to be more efficient and satisfies students. The purpose of this study is to explain how Management information systems can be used in the management of student relations in higher education, analyzing the best business schools.

Keywords: High education, management information system, students' satisfaction, servqual, India, Business school

Introduction

The use of information technology in educational management has rapidly increased due to its efficiency and effectiveness. In the initial stages of its development, management information systems (MIS) main purpose and usage was to improve the efficiency of school office activities. It was used to store student and personnel data. The most concern was being focused on data entry and collation, rather than upon data transfer or analysis. The value of management information was recognized during its integration stages. MIS can provide administrators and teachers with the information required for informed planning, policy-making, and evaluation. MIS have changed school management in the areas of leadership, decision making, workload, human resource management, communication, responsibility, and planning. These systems can assist the B-school manager in determining the aims of the B-school, formulating strategic plans, distributing resources, and evaluating staff performance as well as organizational success

Education and preparation of students with the information and knowledge needed for his or her businesses is one among the most basic objective of business colleges.

In order to successful complete this method, these Business College should produce necessary physical, instructional and administrative structures that the scholars need.

In India, because of high profit-making colleges, lack of qualified staff, low ability of scholars, and also the undeniable fact that business colleges aren't lawfully qualified as non-profit organizations, moreover the amount of satisfaction of university students. etc. there are serious issues that have an effect on the standard of education along with the scholars satisfaction from the colleges. The use of information technology in educational management has rapidly increased due to its efficiency and effectiveness. B-School managers who used to spend large amount of time in solving complex allocation problems (e.g., staff allocation, resource allocation, timetabling) and monitoring the school operations have now better options due to enhanced technology. Information technologies facilitate the decentralization of work tasks and their coordination in an interactive network of communication in real time (Castells, 1996).

In this research paper, I will concentrate on the impact of Management information systems to satisfy the scholars of business colleges, because today's Management information system is a vital tool for the necessities throughout their tutorial process.

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In India all private business colleges are already using management information system in their instructional method. However, it can't be aforementioned for public business colleges, that still

use solely grade books, that are legal demanded and are also utilized by non-public business colleges, even for the same purpose, using management information system for the shortage of management information system public business colleges is closely associated with the shortage of funds for this purpose and for the IT employees.

In most public business colleges, there is solely IT staffs who contend with the native network and employees computers, and no software engineers are operating. So far, the govt. has not funded any project of public establishments of higher education to develop management data system. Its believed that new reforms in education system, that are in their final planning section, are the start of public business colleges, one thing which will amend the work of occupational colleges and should cut back administrative procedures in business colleges.

Major non-public business colleges were hand-picked on the idea of interviews of varies It employees of business colleges in India: they are only those people who used the integrated module of student management information system from the start of their educational activities. This reality provides colleges a good advantages associated additionally shows that there already an expertise of using these systems.

The following pages describe the information technology and management information system utilized in business colleges.

MIS plays a vital role in the area of decision making as it can monitor by itself disturbances in a system, determine a course of action and take action to get the system in control. It is also relevant in non-programmed decisions as it provides support by supplying information for the search, the analysis, the evaluation and the choice and implementation process of decision making (Obi, 2003). These systems have the ability to provide its users the processed information, analytical models, real-time updates and hypothetical scenarios to assist their decision making process from the angle of the researchers in the next section, the review of literature in business colleges involves understanding the matter of student satisfaction.

After this, we are going to validate the research methodology utilized in this study. We used internet survey form to gather knowledge and analyze those using SPSS. In the end, study conclusions and suggestions are going to be prepared. Many studies have shown that technical facilities in the business colleges have an effects on the educational performance of students: therefore its necessary to envision the effectiveness of service quality on the students perceptions. (Al Khattab and Fries, 2011). This study has outlined the impact of student information system on student's satisfaction.

The main purpose of this study is to spot and judge the factors affecting student satisfaction in India's private academic setting by analyzing a number of B-schools.

2. IT and IS used at B-Schools

B-schools have progressive ICT infrastructure, this infrastructure includes a well established electronic network, IT administrative and academic offices and student laboratories. Additionally, the colleges are equipped with the most servers and the necessary software package.

B-school have software package to fulfill administrative needs and to manage academic management. One among the scholars orientated system is the student affairs information system (SAIS). SAIS was established primarily to produce students with web based services. Student affairs information system (SAIS) is an interactive system wherever students will administer most of their processes at intervals basis. Students who use SAIS will track the performance of their grade, messages and courses: you'll use registration, transcription, grade, weekly schedule, attending and similar things that are associated with the student's tutorial standing.

On the opposite hand B-school uses software package to manage educational and administrative need. Academic and administrative employees uses personal management information system (SIS), an interactive system wherever staff will administer most of their processes at regular basis, they'll add courses and contents, students will apply for admission, can register, add grade, produce copies.

In addition, the colleges are seeking excellence in the implementation of services to produce students with quality services in an attempt to attract lots of additional admission. To facilitate management of learning and learning method, universities have optimized an open license and free access software package. Though this software package, the teacher will published his course program and related Power point presentation, Brochures and assignments with it. The student has the flexibilities to navigate through available materials and upload related work connected solutions at home.

The university also uses the educational management data system (EIS), an open website where students will get detailed info regarding all the academic programs offered. During this software package, universities publish programs of courses and documents associated with courses, like study plans, course details etc., that are loaded into the system by academic and administrative personnel using the personnel management data system. The system conjointly provides info concerning the programs, and analysis method.

3. Literature review

3.1. Student Satisfaction and Service Quality

The most initial school administrative computer applications started its development in the late 1970s. In the early 1980s, several loose, non-integrated clerical and administrative applications were developed but these applications limited the possibilities for management support as the relationships among data could not be analyzed (Visscher, 1996a). During the initial stages the main purpose of software development and usage was to improve the efficiency of school office activities. The use of computers and technologies in educational institutes was mainly to store student and personnel data (Carnoy, 2004). The value of management information was recognized during the integration stages. As a result, many projects were initiated by the governments in many developed countries that provided the stimulus to enter a higher development stage. These projects were directed toward the production of better school information systems which meant increased school efficiency and effectiveness. The focus was the development of a standard system for as many schools as possible with maximum flexibility. The professional approach to systems design was not widespread at this time (Visscher, 1996a). In the 1990s, the emphasis on using ICT to collect

educational data and to improve the administration of educational systems began to increase in the developing countries.

Quality service has been a subject of interest for many examinations (Arambewela and Hall, 2009; Elliot and Shin, 2002; Mulalic, 2012; Oldfield and Baron, 2000; Osman, 2010 Alves and Raposo, 2010) in Higher Education. The quality of service is called best and standardized production distributed by a service. In the education sector, the quality of service is considered to be the fundamental aspect of academic excellence. (Dyson et al., 1996)

Zamamoto et al (1996) defines perceived quality as justification for the excellence of a product or service. Therefore, when students experience the quality of the standardized learning environment of providing services and adequate learning facilities and infrastructure to the students, their interest remains in their organization. (Aliji and Rauli, 2001)

Today, business schools are increasingly familiar with the importance of student satisfaction due to the challenges of a rapidly competitive and dynamic educational environment. (Altback, 1998, Armbella and Hall, 2009). Focusing on student satisfaction helps in fulfilling the needs of students in business schools and meeting their needs, and develops a system that can effectively monitor this process. (O'Neill, 2003)

Today, in the form of Kotler et al (2001), it is mentioned that any company should pay attention to the customer to achieve success and its customers have to provide better value. For so many business schools, student satisfaction will be more important, through which you can achieve a competitive advantage (Kevin and Dooyoung, 2002).

In recent decades, research on customer satisfaction framework has been very popular.

North et al. (2000) have focused on the impact of MIS usage on school management abilities. Their study looked at the role of support in bringing about such processes as well as their implications for the future. However, it was clear that an important feature to consider was the relationship of data collection and collation to data use, since school managers needed quite different forms of analysis in some respect to those that were needed by teachers. Visscher, Wild, and Fung (2001) brought together a series of studies from a range of countries that highlighted important features of computerized school information and management systems, their implementation in a range of schools, the outcomes of this implementation, and implications for the future in terms of further research. Their studies offer the widest view of ICT and school management from the perspective of MIS. However, it was clear from their review that most concern was being focused on data entry and collation, rather than upon data transfer or analysis

Patruzzellis et al (2006) defined customer satisfaction as a result of student evaluation of service based on the comparison of the perception of service with his previous expectations. Meanwhile, Oliver (1997) considers this as a notion that a product or service provides a fulfilling service.

During the review of literature, different determinants of customer satisfaction were identified. Some of these are determinants: Ease of obtaining information (Oliva, Richard and Ian, 1992), past

experiences (Bolton and Drew, 1991), quality performance (Oliva et al., 1992) And while selecting the search time service (Anderson and Sullivan, 1993). Parashuraman et al (1986) says that the level of satisfaction is determined by the difference between the performance of the service provided by the customer and the performance of the client.

Delone and McLean (1992), one of the most popular models on the success of Management information systems, have been used by many researchers as the basis for measuring the success of various Management information systems. Since 1992, the first model examines the relationship between information quality, system quality and user satisfaction. Later, the use of the model is done by using quality information as the determinant of user satisfaction for utility, ease of utility and Management information system and the use of success. (Dylan & McLean, 2002, 2003)

The entire model of DLO and Mclean (1992), known as "Deen and Maclean model of Management information system success", presents six main dimensions of success of IS: (1) the quality of the system, (2) Quality of information, (3) use, (4) user satisfaction, (5) personal effects, and (6) organizational impact.

While the enhanced model (Delone and McLean, 2002, 2003) also includes the quality of service as the third dimension of quality and is used as a new dimension and intended to profit purely. (Ramayeha and Lib, 2012)

Parashuraman, et al (1988) offered to include the quality of service as a user's satisfaction, while Pitt, et al (1995) concluded that the SERVQUAL service was added to the quality Management information system and its service model Suitable for measuring the quality of success.

Mumtaz (2000) in her review of this area highlighted both positive and negative factors affecting ICT use in schools. Positive factors included collegiality among computer-using staff, availability of technical support, resources for school development, smaller class sizes, and more formal computer training. Technical support and senior management commitment and support were the most recurring themes (Mumtaz, 2000; NGfL, 2002; Scrimshaw, 1997). Other themes apparent in the literature were the staffs' personal feelings, skills, and attitudes to IT in general (Hruskocy et al., 2000; Kirkman, 2000; Mumtaz 2000).

Later, McKinney et al (2002) developed a measurement model of web client satisfaction. According to this model, perceived performance was examined in terms of information quality and quality of the system

4. Methodology

This study was taken from the circular dimensions of Parshuramam (1986). The variables in this study are measured as overall student satisfaction, with full satisfaction from B-schools, while independent variables are the quality of service in higher education that assesses the level of satisfaction with the performance of the service. Dimension is the reality involved in this variable (physical proof of service), security, accountability, reliability and sympathy.

Using this Management information system in various B-schools. In this survey, we collect feedback from students about their experience in incorporating students' perceptions of IT; Simplicity, functionality, transparency, privacy, access and electronic library facilities.

The questionnaire requests the following information; (A) Satisfaction with IT facilities from B-schools, (b) Website related to students, (c) Functionality and simplification of different types of student information system, (d) Content teacher during evaluation of students and The role of transparency sais, (e) the secrecy of the degree in sais, (f) ease of access to personal information regardless of time and place, (g) contributions system of the student's administrative processes To micro and small (H) student information on reducing electronic library facilities

5. Research Framework

SPSS was utilized to analyze the data and to obtain results. The reliability of the scale was tested using Cronbach alpha. The coefficient alpha resulted to be higher than 0.8 for all SERVQUAL dimensions, which is considered to be a good result (Nunnally, 1978). Also alpha coefficient for student satisfaction is 0.83 so this confirms the internal consistency of this model (Nunnally, 1978).

6. Results and Findings

Table 1 shows that student’s satisfaction and the value of Pearson Correlation Coefficient between students ’evaluation of quality of services dimensions (SERVQUAL) is 0.763. This value shows that there is a statistical significance, or saying it in other words there is a positive and significant relationship between service quality offered to the students at the university and their satisfaction. This means that more qualitative services offered to the students will generate better results and more satisfaction to them

	Satisfaction	SERVQUAL
Satisfaction	Pearson Correlation	.763**
	Sig. (2-tailed)	.000
	N	62
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Table 1. Pearson coefficient between students’ satisfaction and SERVQUAL

Table 2 is a summary of the survey, showing the coefficient of standard deviation which is close to zero. This means that there is a strong and positive correlation between the variables. It means that students almost have the same level of satisfaction about the quality of IS offered by B-schools.

	Cycle of studies	IT Facilities	Content of webpage	Rate IS	Functionality and simplicity of IS	Transparency of role of IS	Grades privacy on IS	Accessibility of IS	Shortening of procedures by IS	Overall satisfaction from IS	E-Library facilities
Valid	62	62	62	62	62	62	62	62	62	62	62
Missing	0	0	0	0	0	0	0	0	0	0	0
Std. Deviation	.46478	.97835	.87037	.86059	1.32303	.80404	.49106	.62556	.83802	.74870	.79278

Table 2. Summary of Survey

7. Limitation of the study

The main limitation of this study is that the number of respondents is limited, which means that these results may not represent all the Business schools.

8. Conclusions

Information technology in educational management is a relatively new field that not only needs in-depth studies on systems utilization in schools but also on their effects on the B-school processes and maybe outcomes (Bisaso & Visscher, 2005). Demir (2006) further supports this argument stating that although there are many studies on the role of information systems on class and teaching, few studies have been done on the use of them in educational management and their effects on the managers.

This study has analyzed the perceptions of students of Management information systems used in Indian B-schools, which have special emphasis on Indian Institute of Information Technology (IIIT). The dimension of student satisfaction is consistency (physical proof of service), security, accountability, reliability and sympathy. In general, the study found that students are satisfied with SI services and more qualitative services provided to students have produced better results and greater satisfaction for them. Apart from this, the study has shown that in relation to the quality of IS offered by various universities, students have almost the same level of satisfaction.

Studies on MIS should also focus on finding ways of enhancing its use by school principals and administrators. Appropriate training and effective leadership could escalate the benefits of MIS in the area of school management.

The findings of this study cannot be generalized for all business schools in India, but it can be helpful in allocating more resources to improve vocational schools and improve academic quality as it relates to the general expectations of the concerned student Related to the quality of service.

References:

1. Al Khattab, S. & Fraij, F. (2011) "Assessing Students' Satisfaction with Quality of Service of Students Management information system", *Management and Marketing Journal*, issue 01, pp. 111-125.
2. Alridge, S. & Rowley, J. (2001). Conducting a withdrawal survey. *Quality in Higher Education*, 7(1), 55-63.
3. Alves, H., & Raposo, M. (2010). The influence of university image on student behavior. *International Journal of Educational Management*, 24(1), 73-85.
4. Altbach, P. (1998). *Competitive higher education knowledge: The university and development*, London: Albex.
5. Anderson, E. W., & Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12, Spring. pp. 125-143
6. Arambewela, R. and Hall, J. (2009). "An empirical model of international student satisfaction", *Asian Pacific Journal of Marketing and Logistics*, Vol/21 No.4, pp.555-569.
7. Bolton, R. N. & Drew, J. H. (1991). A longitudinal analysis of the impact of service changes on customer attitudes. *Journal of Marketing*, 55,1-9.
8. Cheng, Y. C., Tam, W. M., & Tsui, K. T. (2002). New Conceptions of Teacher Effectiveness and Teacher Education in the New Century, *Hong Kong Teachers' Centre Journal*, Vol. 1, Spring 2002.
9. DeLone, W. H., & McLean, E. R. (1992). Management information systems success. The quest for the dependent variable. *Management information systems Research*, 3, 60-95.
10. DeLone, W. H., & McLean, E. R. (2002). *Management information systems Success Revisited*. Paper presented at the 35th Hawaii International Conference on System Sciences, Big Island, Hawaii.
11. DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean Model of Management information systems Success: a ten-year update. *Journal of Management Management information systems*, 19(4), 9-30.
12. Dyson, P., Farr, A. and Hollis, N.S. (1996). Understanding, measuring, and using brand equity. *Journal of Advertising Research*, 36(6), 9-21.
13. Elliott, K. M., & Shin, D. (2002). Student satisfaction: An alternative approach to assessing this important concept. *Journal of Higher Education Policy and Management*, 24(2), 197-209.
14. Kevin. E. and Dooyoung, S., (2002), "Student Satisfaction: an alternative approach to assessing this important concept", *Journal of Higher Education Policy and Management*. Vol. 24, No. 2.
15. Kotler, P.; Armstrong, G.; Saunders, J. and Wong, V. (2001), *Principle of Marketing*, Third European Edition, Prentice Hall.
16. Nunnally, J.C. (1978), *Psychometric Theory*, McGraw-Hill, New York, NY
17. Parasuraman, A., Zeithaml, V. & Berry, L. (1986). SERVQUAL: a multiple-item scale for measuring customer expectations of service quality. Report No. 86 - 108, Marketing Science Institute, Cambridge, MA.

18. Parasuraman, A., Zeithaml, V. A., & Berry, L. (1988). SERVQUAL: a multiple-item scale for measuring customer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
19. Petruzzellis, L; D'Uggento, A. and Romanazze, S. (2006), "Student satisfaction and quality of service in Italian Business schools", *Managing Service Quality*, Vol.16, No.4, pp.349-364.
20. Pitt, L. F., Watson, R. T., &Kavan, C. B. (1995). Service quality: a measure of information effectiveness. *MIS Quarterly*, 19(2), 173-187.
21. Ramayaha, T. &Leeb, J.W.CH. (2012) "System Characteristics, Satisfaction And E-Learning Usage: A Structural Equation Model (SEM)". *The Turkish Online Journal of Educational Technology*, volume 11 Issue 2. pp. 196-206.
22. Usman, A. (2010). The Impact of Service Quality on Students' Satisfaction in Higher Education Institutes of Punjab. *Journal of Management Research*, 2(2). Accessible at <http://www.macrothink.org/journal/index.php/jmr/article/view/418/1470>
23. Zammuto, R. F., Keaveney, S. M. &O'connor, E. J. (1996). Rethinking student services: assessing and improving service quality. *Journal of Marketing in Higher Education*, 7(1), pp. 45-69.

