

Information system research paper

[Business](#), [Marketing](#)



Introduction

The ultimate aim of this essay is to investigate an information system (IS) of choice in an organization. This way, the essay will help in the application of the material learned in class to a real world organization and information system. The industry of choice is Education. The information system of choice is an Integrated Library System (ILS) such as that used by many colleges including Monroe College in New York (McManus 23).

a. Competing on a Global Scale

ILS has gone a long way in helping library systems and educational institutions compete on a global scale. Even small libraries can now be accessed from anywhere in the world using web interfaces. As such, ILS has proved to be extremely important in allowing libraries and school systems to compete on a global scale. The system basically works like any other website. The database and code that implements the logic are hosted in a central server. The website is then accessible from anywhere but only the staff and patrons who are registered and have login credentials can access the system. Thus the system uses the worldwide web network for its operations. By using the worldwide web network, it means that the system can be accessed from different geographical locations in the world meaning that it has helped libraries compete on a global scale.

The advent of the internet has had a variety of effects on the way educational institutions operate. These effects can be advantageous and disadvantageous to the institution. The following are some but not exhaustive effects of the ILS system on educational institutions.

First and foremost, since the use of ILS shrinks the distance (i. e. reduces the distance) between communicating terminals, this has helped small upcoming institutions and libraries gain publicity by simply advertising themselves over the internet. This has seen the rapid growth and expansion of these otherwise small institutions since they are able to reach large groups of potential students. Thus, institutions which might be located in some remote areas far from most of their intended prospective students can capitalize on the internet.

Hence, a small or otherwise upcoming institution is able to commercialize its services over the internet and subsequently gain international publicity. This will subsequently lead to the expansion and eminent growth of the institution since it would have expanded its base which is usually vital to any institution's expansion and growth.

b. Competing on Quality and Design

The ILS system has greatly helped in improving the quality of services offered to patrons and staff in a library setting. ILS, like most information systems, has both hardware and software components (Guthrie 5). These systems are powerful designed and they help improve on the quality of service offered to patrons and staff. Hardware consists of powerful computers with a high processing speed and many gigabytes of storage capacity. This is because many people (both staff and patrons) access the system simultaneously and do not expect delays. As such the computers are very powerful. Further, the amount of information stored is enormous. Since ILS is designed to be used in big libraries serving thousands of patrons, there

must be sufficient disk space to store all the information pertaining to all patrons e. g. their names, addresses, occupations, contact details and passwords. The system also stores all information pertaining to books and other publications e. g. author names, place of publication, title of publication, type of publication (such as book, journal, magazine etc), date of publication and ISBN numbers.

Further the ILS system has powerful software components. It is primarily programmed in the much respected Perl scripting language although it has a few sections that are written in the C programming language (Guthrie 24). It has a very powerful and user friendly Graphical User Interface (GUI) that gives patrons and staff different interfaces that enable them to have a better experience in their library activities.

It should be noted that for an institution to survive in any educational environment, it should and must always work towards satisfying the needs and expectations of its students and staff. To satisfy this group of people, the institution must use technologies and even information systems that will give the institution an edge over the other institution offering similar services. This is to say that the technologies used by the institution must be geared towards improving the quality of the service and also reducing the time taken to produce the service (i. e. the product development life cycle). In turn, this has the effect of increasing the services that are offered at any given instance which in turn increases the institution's profit.

Thus with the appropriate technology and information systems in place, an institution is able to meet its staff and students' needs and expectations and

also improve on the quality and precision in the delivery of services it is offering. This has the overall effect of maintaining the existing staff and students and even wooing more students into enrolling or using the institution's services.

Competition in educational systems can occur in a variety of ways ranging from the quality of educational services, the quantity of these services or even the fees charged for accessing learning services and facilities.

However, the most notable and significant form of competition that normally exists between or among educational institutions dealing in similar services is usually based on the quality of teaching being offered. For an institution to get an edge over the others in the industry it must make sure that the educational services it is offering or producing are of a quality and that they meet the requirements of the prospective students. To ensure quality services, an institution must make sure that it incorporates technology in its processes. This would serve to achieve the following:

It would help in automation of the process of delivery of services (Bessel 43). This in turn would increase the output of the institution since machines tend to work faster than human beings. Thus the amount of work that would have been done manually in a day can be done using machines (i. e. automatically) in less than a day.

Furthermore, automation of the process of delivery of services would reduce some of the errors in the process that normally arise due to human errors (knowingly or unknowingly) (Bessel 57). Hence this ensures that the quality of the services resulting from the process is guaranteed and is also of the

desired standards and specifications.

Thirdly, automation of the process of delivery of services reduces the amount of labor used (Bessel 81). This reduction in labor is advantageous to the institution in that less money will be spent on labor. This money might in turn be used to improve on other departments of the institution or even to purchase more books further improving the experience of students and staff.

Fourthly, incorporating technology into an educational institution's process of delivery of services has the effect of helping automate some repetitive or otherwise redundant tasks in the process (Bessel 69). This in turn has the net effect of speeding up the process and subsequently increasing the net productivity of the institution. The ILS library system helps educational institutions achieve all of the above mentioned objectives and thus helps educational institutions compete on quality and design.

c. Competing on Business Processes

Libraries are critical components of any education system. Teachers and students will always need to read and refer to books to obtain materials for teaching and learning respectively. Libraries are thus handy in the search for information. Prior to the advent of computers, librarians had a hectic time managing books and other publications in libraries.

This was especially true if the library had thousands of books and thousands of visitors every day. Books had to be organized in a particular manner and librarians had to find a way of memorizing this organization. Learners visiting libraries also had a hectic time locating a book in the library. Every borrowed

book had to be entered as a manual entry in a list. The whole process was very hectic.

The advent of automated library systems greatly helped libraries and the entire education industry as it made the lives of students and librarians much easier. With an Integrated Library System (ILS), it is easier for staff to keep records and for patrons to find the books they desire within the shortest time possible. It also enables libraries to provide digital copies of books.

The system has greatly helped educational institutions increase their efficiency consequently increasing their productivity. First, libraries are hiring less staff since ILS takes care of most of the tasks that were initially done manually. This staff reduction translates to increased revenues for educational institutions. There are also improved relations between patrons and libraries as finding publications becomes easier and the usual manual hustles are eliminated. The major business function of the system is to enhance to enhance library functions. The systems services all the levels of management as students and teachers can access and use it.