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A Study of ERP & It's Role in Indian Universities

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Abstract

Today ERP (Enterprise Resource Planning) has a great role in various fields of business as well in education. The adoptation of ERP has a positive response towards education in various universities & educational institutes. In fact the involvement of management, parents, and students makes effective effort for the growth of education. While ERP systems have traditionally been used by capital-intensive industries, such as manufacturing, construction, aerospace, and defense, they have recently been implemented in the finance, education, insurance, retail, and telecommunications sectors.ERP has a great standard role upon technology to implement it in educational system. the concept is not only new but also challenging to the Indian Universities. This paper includes ERP, its opportunities and challenges, characteristics, advantages & the role of ERP system in Indian Universities.

***Keywords**: Intensive, consultancy, security, feedback.*

Introduction:

Enterprise Resource Planning (ERP) can be defined as "planning the resources in an enterprise or using the resources in an enterprise effectively and efficiently". Enterprise Resource Planning system can be regarded as one of the most innovative developments in information technology of 1990s.With the growing interest of many organizations in moving from functional to process based IT solutions .while ERP systems have traditionally being used by capital intensive industries such as manufacturing construction aerospace and defense .They have recently been implemented in the education, finance ,insurance , retail and telecommunications sectors(chug and synder ,2000).

History of ERP:

The term ERP was coined in 1990 by 'Gartner', but its roots date to the 1960s. Back then, the concept applied to inventory management and control in the manufacturing sector. Software engineers created programs to monitor inventory, reconcile balances, and report on status. By the 1970s, this had evolved into Material Requirements Planning (MRP) systems for scheduling production processes. In the 1980s, MRP grew to encompass more manufacturing processes, prompting many to call it MRP-II or Manufacturing Resource Planning. By 1990, these systems had expanded beyond inventory control and other operational processes to other back-office functions like accounting and human resources, setting the stage for ERP as we've come to know it.

ERP Overview

An ERP system for universities, we need to ensure that it takes care of multiple perspectives pertaining to students, teachers, staff, administration, parents etc. All the data is managed in a time sensitive manner along with the rules and policies applicable at that time, so whenever required, the exact information can be reproduced as it is. Various functions involving a number of campus requirements, Human Resources and Financials should be integrated. In addition, the system integration is more challenging in a university having multiple campuses. The ERP project involves a wide range of actors, including the university's management and central administration, the software vendor itself, and a number of third party consultancy companies. At the heart of Enterprise is a large and complex relational database that will eventually contain information on the status of staff, students, buildings, equipment, documents and financial transactions. The Enterprise system is produced by a large software producer and includes a number of modules dealing with particular functions or aspects of the university, including finance, human resources, and project management and student records.

An Education ERP system creates a single version of the truth because everyone uses the same system. Education ERP improves workflow and the efficiency of an organization. For example, Easy and quick way to pursue the completion of online-requisitions, similarly workflow processes can forward the form along the approval path more rapidly than with traditional paper methods. Students get a new platform not only to gain but also to express the knowledge base inside them. The simplified and effective way

to of joint efforts of learning will give them a great ground to run in up to the limits of their will power. Tools like articles and online exams do provide them a new deal of learning and perfection. Realizing that a student teacher relationship is the most important relationship in education, ERP solution tries to give them a new media of interaction. This new media leaves behind the limitation of time management and set curriculum. In today's busy scene where often both the parents are working or living far away from the institution, personal visits to the institution is really not an easy task. The Education ERP enables them to have a closer look to their wards performance and will provide a fact based approach to their wards life. Also all this can be straight monitored from their home or offices. Besides this e-news, polling and forums brings them closer to the institution. With the help of the ERP, college management has a systematic and easy approach towards maintaining and updating the different aspects of the website. All the management aspects of the institution like the admission process, message broadcasting, notice boards, and e-zones publishing are taken into account which not only saves resources but also provides efficiency in working. As already mentioned, ERP system promotes integration. In fact, the reason ERP packages are called integrated is the automatic data exchange among applications related to basic components. Conventional information systems of an organization are weak in terms of the communication and integration of information that transcended the different business functions. The timing of the system construction and directives differ for each function and sometimes they are disconnected. Hence it has become an obstacle in the shift to new product and business classification.

Characteristics of ERP

- An integrated system that operates in real time (or next to real-time), without relying on periodic updates.
- A common database, which supports all applications in organization.
- A consistent look and feel throughout each module makes effective decisions.
- Installation of the system without elaborate application/data integration by the Information Technology (IT) department, provided the implementation is not done in small steps.
- Quick & streamlined flow of Information.
- Improved existing processes and increased flexibility.

- Improved Decision-Making Capability for actual challenges.
- Improved utilization of resources.
- Reduced query process Cycle Time.
- Increased Productivity transparency.
- A platform for students to participate in forums that involve career discussions and other important issues

Issues & Challenges in ERP:

ERP system has several advantages, both direct and indirect in the education. While advantages such as improved efficiency, information integration for better decision making, faster response time to queries, etc., come under the direct category. Actually use of ERP has provided better corporate image, improved parents, student, staff and management goodwill as well as satisfaction, etc., may find their place in the indirect lot. The qualitative adaptations of new platforms are under the challenges of ERP.

Advantages of the ERP:

Educational Integration

As already mentioned, ERP system promotes integration. In fact, the reason ERP packages are called integrated is the automatic data exchange among applications related to components. Conventional information as per requirements of users. Systems of an organization are weak in terms of the communication and integration of information that transcended the different business functions. The timing of the system construction and directives differ for each function and sometimes they are disconnected

Flexibility

As many organizations have involve global proportions for ERP, it's important to take care of diverse operations related to multinational environments such as language, personality standards and so on. All such differences can be covered in one system that can manage functions across multiple locations of such organizations. Hence ERP systems have major advantages not simply for development and maintenance but in

terms of management. The working of these organizations has captures the new challenges of social as well educational site.

Improved planning and analysis:

ERP enables the organizations to fully utilize many types of decision support systems and simulation functions because of the comprehensive and unified management of related term and its data. Decision makers can easily avail the data and hence make better decisions. the decisions of better data availability and role of excellent planning for perfectness makes it easy to face new queries or questions.ERP also observe the given responses of parents as well as of management to follow the rules of better adoptability in education. The enhancement of study and real standard makes effective role in educational institutions.

Current information and technology for improved educational standard :

ERP organizations are very quick to take advantage of the current information and systems such Internet/ Intranet, Computer Aided machines and Logistics Support, electronic commerce, etc. Such essential information enables the ERP system to adapt to changes in future educational environments of perfect uses. The uses of client server applications database servers has advance effects on organizations standard. Role of new challenges of society and management makes effective participation towards educational standard in Indian universities.

Challenges of ERP

Leon ((2008) feels that ERP entails various risk factors pertaining to people, process, technology, implementation, operation and maintenance. Change management, inadequate staff, inappropriate project team, inadequate training, employee relocation, top management support, discipline, program management, business process reengineering, stage transition, benefit realization, software functionality, technological obsolescence, upgrading the ERP system, organizational politics, unexpected gaps, insufficient funding, high initial investment, project size, etc., may pose serious challenges in building and implementing the ERP systems.

Role of ERP in Indian universities

ERP systems are now considered the standard technology on which many organizations are operating their Institutions and they are , therefore known by specific ERP standard they are adopting (sweat,1998).ERP systems can run on a variety of computer hardware configurations. Typically employee database as a repository for information. Currently SAP, Oracle, baan, PeopleSoft, and J.D. Edwads are considered top ERP vendors. Despite the differences in the marketing policies of their vendors, these packages have similar offerings and shortcomings and they still adopt the MRPII's model for the manufacturing planning component system product (Gray and Landvater). One of the major challenges in ERP adoption is flexibility assurance. Organizations will always need to integrate newly acquired business functionalities into its data processing system with the minimum time possible (Gupta, 2000). When it comes to selecting and adopting an ERP system for universities, we need to ensure that it takes care of multiple perspectives pertaining to students, teachers, staff, administration, parents etc. All the data is managed in a time sensitive manner along with the rules and policies applicable at that time, so whenever required, the exact information can be reproduced as it is. Various functions involving a number of campus requirements, Human Resources and Financials should be integrated. In addition, the system integration is more challenging in a university having multiple campuses. The ERP project involves a wide range of actors, including the university's management and central administration, the software vendor itself, and a number of third party consultancy companies. At the heart of Enterprise is a large and complex relational database that will eventually contain information on the status of staff, students, buildings, equipment, documents and financial transactions. The Enterprise system is produced by a large software producer and includes a number of modules dealing with particular functions or aspects of the university, including finance, human resources, and project management and student records. An Education ERP system creates a single version of the truth because everyone uses the same system. Education ERP improves workflow and the efficiency of an organization. For example, Easy and quick way to pursue the completion of online- requisitions, similarly workflow processes can forward the form along the approval path more rapidly than with traditional paper methods. Students get a new platform not only to gain but also to express the knowledge base inside them. The simplified and effective way to of joint efforts of learning will give

them a great ground to run in up to the limits of their will power. Tools like articles and online exams do provide them a new deal of learning and perfection. Realizing that a student teacher relationship is the most important relationship in education, In addition, the system integration is more challenging in a university having multiple campuses. ERP implementations are difficult, even in very top-down corporate environments. Getting them to work in universities, which are essentially a conglomeration of decentralized fiefdoms, is nearly impossible. Staff in the largely autonomous departments does not accept the one-size-fits-all strategy of an ERP implementation. Yet for universities, developing all software in-house is not an option. Many universities may not have the talent and financial resources to create and manage a robust enterprise system. Indeed, representatives from PeopleSoft, which dominates the higher education market for ERP, say that a large part of the problem results from the inexperience of university IT departments and their tendency to rush implementations and inadequately test the new systems.

Conclusion:

An Education ERP system creates a single version of the truth because everyone uses the same system. Education ERP improves workflow and the efficiency of an organization. For example, Easy and quick way to pursue the completion of online- requisitions, similarly workflow processes can forward the form along the approval path more rapidly than with traditional paper methods. Students get a new platform not only to gain but also to express the knowledge base inside them. The simplified and effective way to of joint efforts of learning will give them a great ground to run in up to the limits of their will power. Tools like articles and online exams do provide them a new deal of learning and perfection. Realizing that a student teacher relationship is the most important relationship in education, ERP solution tries to give them a new media of interaction.

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