CONCLUSION AND SUGGESTIONS

5.1 CONCLUSION:

Most of the educational institutes were looking towards ERP as a necessary expenditure almost all of them felt that ERP was necessary to control their existing capabilities in a competitive world. The end users satisfaction has increased in the past after the ERP package was implemented with increase in performance in productivity. Thus it enhances the effectiveness and efficiency of functions of institutes in every aspect.

Thus this research work is done to analyze quality, performance, and user satisfaction etc of present ERP system implemented in educational institutes. Findings of the research are basically on the responses which were received from the educational institutes which have participated in the research.

Overall analyzing the responses it was found that the ERP system has helped the institutes’ functions of different sector in improving their performance and yielding much better results. The research shows that the user satisfaction has increased due to implementation of ERP. The research tested the positive relationship of the age of end user and user satisfaction on the other hand it is observed that the computer expertise of user does not have an impact on their satisfaction related to ERP system. ERP system also increased overall performance of the institutes and received following advantages like:

1. Reduced the paper work
2. Reduced re-entry of data
3. Reduced duplication of effort
4. Provide accurate information on time
5. Increased institutional accountability
6. Improved transparency in work

The researcher had also analyzed the information and system quality and the analysis which shows that the end users are satisfied with the present ERP system, but require improvement in some areas. Even though ERP implementations has benefits for the education system but there are some problems which are faced by the institutes related to their present ERP system. Many institutes are not satisfied with the response that they receive from their ERP system as the system does not fully meets their requirements and more up gradation is required. Some institutions not satisfied precision of the information.

The institutes are also facing some problems related to their ERP system like bugs and data errors, system is unable to check unauthorized user. According to this research the cost of the ERP system is major drawback and many end users responded that the ERP system does not solved the maintenance associated with old system. The study shows that the lack of involvement of end users in ERP Implementation and their training are the major issues in educational institutes. The poor vendor support is also the issues which should be addressed immediately by the educational institutes to make the ERP system more economical.

Thus the education institutes needs to rectify all the lacunas associated with their present ERP system to make it more effective. The suggestions given by this research will also help to improve the present ERP system of the educational institute and make it more result oriented.
5.2 SUGGESTIONS:

1. Data Conversion:

Data conversion is the process of moving/copying and restructuring data from an existing system to the ERP system. Conversion is critical task to implementation success and requires significant planning. Unfortunately, since conversion is one of the final activities before the production phase, it often receives insufficient attention. It is necessary for the educational institutes to maintain the old system as evidence even after conversion.

Thus Analysis show that the ERP system does not solved maintenance problem associated with the old (legacy) system. Thus Institutions are required to convert and restructure their complete data into ERP system through proper planning. This will solve the maintenance problems related to old system.

The following steps can structure conversion planning

- Identify the data to be migrated
- Determine migration timing
- Generate the data templates
- Freeze the toolset
- Decide on conversion-related setups
- Define data archiving policies and procedures.
2. **Involvement and end users in ERP implementation:**

The study shows that end users are not involved and participated in implementation of ERP system in most of the educational institutes. User involvement is one of the critical success factors for the success of any ERP system. The user can be involved in the implementation process are:

(a) **Communication**

Communication is the key to success of any new strategy or implementation. Expectations and goals help an organization recognize milestones in the ERP process. The users should be aware about project strategy and objectives. Users need to know about the changes due to implementation of ERP system. Therefore the information about the ERP implementation should be shared to users through proper process.

(b) **Feedback from end users**

Take the feedback from end users regarding the processes and problems with ERP will be received and acted on. Complete and open communication can leverage successes and facilitate enterprise-wide learning about ERP.

(c) **Conference room pilot (CRP)**

It is better to implement ERP in phased manner. Test it before final implementation decision. CRP which provides a demonstration of the ERP system that users can test drive before the system configuration is locked down. Through the CRP institutes can involve the end user in implementation and take the feedbacks to rectify the problems.
3. **Training of an End user**

Enterprise Resource Planning (ERP) solution training is important equal to or placed little above the evaluation and selection of an ERP system itself. However, training is often the most overlooked and under funded portion. This study also analyzed that 77% of the respondents agree that there management does not provide training of ERP system. Insufficient training could cause operational delays and a hurdle to Institutes goals. Therefore educational institutes can use following training strategy:

(i) The users need to have the skill for using the functionality relevant to their roles. They should understand the basic concepts of ERP and also how to perform the day-to-day activities in the ERP system. Therefore while implementing an ERP system the end user need to develop such knowledge and skills that will enable them to establish how to best use the functionality for the operation and maintenance phase. Since the end user of the ERP system will become the trainers of other employees, they need to develop the skill to be able to formulate and deliver a training course.

(ii) A mini training session using a simulation package used a CBT package to train employees to learn the concept of ERP system. These relatively in expensive CBT packages may be helpful to employees in understanding the working of ERP system.

(iii) Cooperating with a colleges/university. If the above simulation package is hard to use, companies may consider cooperating with nearby universities or colleges. Some universities with ERP education programs would provide step by step training in implementing the ERP software.

(iv) Proper staff selection and training shall be given in the vendor company to avoid day to day office working disturbances so that the end user will
concentrate on their work properly to understand the concept and functioning of his working.

(v) Also trained and educate the end user about confidentially of the system, so that security issues will not occur.

4. **Customization of ERP system:**

The Analysis shows that the present ERP system provide the accurate information in time, but same time ERP system does not provide up to date (formatted) information according to the requirements. Thus the institute’s needs to modify their system and make ERP system customized. The ERP system shall able to provide information to end users in the required and systematic manner. Most organization discovers how compatible the new ERP is with their existing systems and processes when they turn on the new system. When it is discovered that the ERP differs from the system it is replacing, the organization is faced with the possibility of either customization or tailoring the ERP. There are four basic choices to customization:

1. Modify the ERP system to match the educational institute processes and/or data structures.
2. Modify the educational institute’s processes and/or data structures to match the ERP.

Choice 1 and 2 require understanding of the ERP and institute processes and data structures. Most organizational approach the customization/tailoring decision without the proper information required to reach a good decision.
5. **Software development, testing and troubleshooting:**

The study also shows that present ERP system of the institutes contain software bugs and data error. Therefore development and testing of ERP implementation shall be done at the pre-implementation stage only as per the requirement of the institute functioning and managed accordingly. End user of ERP shall work closely with vendor’s team member to resolve software problems. Accurate and complicated software testing eases implementation. Integration of homegrown systems and specialized software products with the ERP suite is necessary to achieve the full benefits of the implementation.

6. **Vendor support**

The educational institutes are also not getting sufficient support and services from vendors. Satisfactory support is must for success of ERP system and institutes require vendor support to manage technical issues and upgradation of the system.

Therefore Institutes can resolve this issue by following strategies:

(i) Proper vendor selection: Find a local vendor which is easily accessible to the institutes so that institutes can get the support on time.

(ii) Institutes can appoint own technical support system to maintain the ERP system. The Institute can provide special training for the employee(s) through vendor of the system. This will help institute to create internal expertise and they will not be always dependent on vendor.

(iii) Most large-scale ERP projects utilize consultants, who can play many different roles. Consultants can help end users of the institute, take
responsibility for project management, audit the project, function as the prime contractor, and serve as the one source for everything from software to hardware and personnel for the ERP system.

(iv) Contract is also critically important to get proper service and support from vendor. Develop a precise contract with both legal and ERP expert review.

Many institutions will get an ERP project with one main vendor because of the advantages of having one channel for communication. This prime contractor often subcontracts out other work and services as needed.

Develop a precise contract with both legal and ERP expert review. Should you attempt to negotiate a fixed-cost or a time-and materials contract? We have done both. The fixed-cost approach has some advantages, but the language of the contract will need very careful wording, since vendors will look for loopholes to reduce their costs. On the other hand, a time-and-materials contract should have clear milestones and performance benchmarks to ensure best use of your resources. It suggest that your contract allow for changing technology during the course of ERP project. ERP projects can often last for an extended period of time, and new functionality or ERP modules may become available that weren’t included in the contract. Finally, be skeptical of vendor promises. Get it in writing. Even if institute have a prime contractor for services, you’ll need to build a relationship with the software vendor to deal with difficult issues such as the need to fix software bugs, referred to as technical assistance requests (TARs)
The vendors can also improve in some areas by giving value added services like:

(i) Web enable interface to ERP system through remotely can solve end user day to day maintenance problem. Remote technical support services are gaining in popularity over time-consuming trips to solve end user problems of ERP system. Plum Choice offers remote services into user’s own computer while the user is connected by phone or chat to a technician to manage their computer issues and remotely solve any problems.

(ii) Vendor shall appoint employee at permanent basis for the big institutes and for small institutions employee of a vendor must visit to the institute at regular basis.

7. Feedback of End users:

As findings shows that, the present ERP system of institutes not fully meets their requirement therefore modification is required in their present ERP system, thus institutes needs to take regular feedback from the end users and analyze the problem associated with it. On the basis of feedback from end users institution requires to modify their present system.

8. Reduce the cost of ERP System:

The study analyze that the cost of ERP implementation is major issue for the educational institutes. The ERP implementation cost varies according to the complexity of the system installed. In educational Institutes basic modules such as Fees, payroll, accounting library etc.
The direct costs involved in ERP are:

(i) Cost of Implementation of ERP system: New computer hardware, system software, network equipment and security software

(ii) Cost of Service for implementation: Customization, integration, data conversion, data migration, testing and training

(iii) Cost of maintenance of ERP system

Indirect cost involved in ERP

(i) Time and consequent cost of employees involved in the ERP project.
(ii) Cost of temporary personnel to replace those involved in the ERP project.
(iii) Cost incurred due to other activities not being carried out costs related to offsite travel and sustenance e.g. off site training.
(iv) Cost related to the internal resources such as the implementation team or work team, who administer and maintain the system and provide internal technical system.

Educational institutes need to analyze the above cost and control throughout the project. Some cost like indirect cost involved in the ERP system needs to be control effectively to make ERP economical for the institute. Once costs are identified it is useful to determine what the benefits are and whether the benefits justify the cost.
The following practices will help to reduce ERP costs

Here are a few ways to lower, if not entirely avoid, maintenance costs.

(i) **Select an ERP system after careful evaluation:** Choosing an ERP system is a big decision for any educational institutes. While an ERP system’s failure may lead to huge losses, its success can help an institute enjoy a jump in revenues. Hence, it is critical to select ERP software that eventually doesn’t end up becoming a burden to the educational institutes. The institute shall focus on what it wants to achieve with the ERP system, before going ahead with the process of implementation.

(ii) **Keep an eye on future requirements:** Institutes need to implement an ERP system that not only addresses the challenges of today, but is also in tune with the requirements of tomorrow. This calls for determining clear short-term and long-term goals, well in advance. The software also needs to be flexible to allow for this kind of change, to drive standardization and enable this scaling up. If the ERP system doesn’t have the capability to accommodate changes and upgrades, adding new capabilities to the system after every new development in the institute will lead to cost growth.

(iii) **Don’t depend on vendors alone and set own technical support team:** Maintenance activities can be outsourced to the vendor in case the ERP system is of the on-demand type. In such a case, the company needs to pay only for an AMC (Annual Maintenance cost). But for an on-premise ERP system, it is best to have an internal IT team to set up a self-sufficient system and gradually wean the institute away from over-dependence on the vendor for support. This route may lead to an additional strain on the users to begin with, but over time, this may help in attaining self-sufficiency a lot faster and minimize overheads in the long run.
(iv) **Adopt a detailed approach**: For an ERP system to remain profitable, a methodical approach needs to be put in place, keeping the whole ERP life cycle in view. Right from identifying implementation requirements and selecting a suitable ERP system, to following the best testing techniques for standardizing maintenance procedures all processes need to be thoroughly reviewed to lower maintenance costs.

(v) **The involvement of the top management**: It needs a leader’s vision to make ERP implementation successful. When there is a lack of push from the top management and when ERP implementation is viewed as just an IT initiative and not a key institute goal, then the implementation often gets delayed. ERP fitment issues arise, leading to more customization and support requirements, post implementation, and hence higher maintenance costs.

(vi) **Ensure that employees are comfortable with the new system**: It is important to motivate and train employees to adapt to the new system. When the IT and institute end users within the institute are not fully geared to or are unwilling to cooperate and work on the ERP system, they may find fault with the new system. They will tend to compare it to the old practices and demand customization. This may lead to additional costs.

Thus, to ensure general ERP adoption across the institute, and its final success, it is important to involve both the end users and IT professionals throughout the process of implementation. This will make them feel more comfortable with the application and workflow, post implementation, and help in keeping a check on the maintenance requirements of the ERP system.
(vii) **Choose the vendor with care:** Almost everyone, with whom we spoke to on this subject, agreed that a good implementation partner is a must, not only for the successful implementation of an ERP solution but also for its long term success. The ideal implementation partner would have the domain expertise or previous implementation experience in your specific vertical. Such an implementation partner is likely to have a better insight into institute problems and may even have many pre-built templates, which in turn help speed up work and keep the long term customization and maintenance costs in check. Finally, find a local vendor which is easily accessible to the institution.

9. **Top Management Support:**

Identified as one of the most key success factors of ERP implementation, top management support is needed to publicly and explicitly support the implementation project and deem it top priority. “Senior management must be committed with their own involvement and willingness to allocate valuable resources to the implementation effort. This involves providing not only an appropriate amount of time and resources to get the job done, but also the necessary personnel for the implementations.