

**“A COMPARATIVE STUDY THE COST OF EDUCATIONAL ERP SYSTEM
TO COME OUT FROM LEGACY SYSTEM – THE STAKEHOLDER
EFFORT AND SATISFACTION ON NEW LEARNING MODEL”**

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ABSTRACT

This research gives insight on how the selection and implementation of ERP systems is a highly costly and time consuming process. Cost of Educational ERP software, Cost of hardware and software (Servers, desktop, storage, network, database, OS), Cost of training and maintenance, Cost related influencing factors and vendors. At present, however, many institutions that have successfully implemented enterprise resource planning (ERP) systems still face the challenges of streamlining their operating procedures, reducing the financial and operational burdens of such systems, and ensuring that such systems can be made flexible enough to adapt to new business needs and technological innovations. The Cost is often the first factor institutions consider, because the price tag can be high. Remember to add the cost of any required customizations to the standard package by completing the process mapping and enhancements step. Other typical costs include ancillary systems, maintenance, training, licensing, and technical support. It is also on the how IT

department should identify the criteria for making the final buy versus build decision. Some common factors include performance, functionality, cost, impact on institution functions, state mandates for reporting.

Keywords: ERP-Enterprise Resource Planning, IT-Information Technology

I. Importance of Study

Advancement in technology and demand for quality education is driving ICT implementation in Indian education. Emergence of cloud computing will further pushes the technology usage in the sector in the ensuring year. The implementation of ERP system has been continuing to grow in the public and private sectors and hence there is need of implementation of Educational ERP in educational sectors. It is also important that organizational leaders understand the issues with which they could be faced when implementing EERP. This study explore on different factors which affects EERP implementation in the educational

sector. Educational ERP provides the platform for Institutes to progress from a paper centric to process centric organization. It also provides tools to automate the key academic processes and it provides means of measuring the throughput of the processes through numerical and graphic reports. Academic processes will be streamlined, leading to smooth and fast functioning. Model suggested by researcher will be more cost effective and hence more Institutes can buy it. Decision making ability of management goes up, as a result saving time and enhancing effectiveness. Reduce human errors and efforts. Information from this study may be useful in determining how well the needs and expectations of other Universities/ Institutes have been met when implementing EERP.

II. Statement of Problem

This research gives insight on hurdles about awareness and cost of automation for the implementation of educational ERP in the field of Technical and Health Science institutions.

III. Objectives of the study

The researcher has set primary Objective as given below:

1. To study the concept of educational ERP in different Technical and Medical Educational Institutes.
2. To understand the cost of the proposed ERP systems as compare to the existing legacy System.

IV. Hypotheses of the study

In consistent with the objectives, following hypotheses were formed by the researcher:

H1: Educational ERP leads to effective decision making in Educational Institutes.

H2: Educational ERP are very much cost effective as compared to legacy system

V. Research Methodology

This research study is related to the use of educational ERP system implemented by University/ Institutes in Pune district. It utilizes both primary and secondary data. The secondary data utilizes already available information both published as well as unpublished. For primary data however such a facility is not available and it has to be collected by using the survey method. The scope of research is limited; the survey is undertaken by obtaining a stratified sampling technique. The description of the research

methodology required for the process of obtaining a sample as well as the nature and size of sample should be adequately explained. A stratified sampling technique involves the selection of respondents based on the important characteristics under study such as implementation of EERP in Institutes and specific knowledge related to the research problem.

Primary data

Data were collected via a survey method designed by the researcher. The researcher created a survey instrument based on the benefits of implementing EERP and the critical factors affecting an EERP implementation as defined in the review of literature. As the instrument was developed, it was periodically reviewed by EERP professionals and modified based on their suggestions.

Population

After searching the AICTE, Universities and private institutes web portals it has been revealed that there are around 373 institutes along with one Statutory and nine Private University. Upon further analysis of the list it is found that only 56 institutes were using Educational ERP system. The list can be further filtered according to the following criteria

- The Institutes and Universities must be located in Pune District as Shown in Map of Pune district.
- They should belong to different institutes running courses like Management, Engineering and Medical.

Sample Size

- Researcher at the beginning of research was not having any idea about how many of these Institutes / Universities are using EERP system? Hence it was decided to send the questionnaire to all of these Institutes / Universities and in order to get better representation it is decided that minimum of 40 institutes under Management, Engineering and Medical be covered in the survey.

Respondents

- EERP systems cover the entire areas of operation and have various module integrated with other. These modules are interdependent and cannot work in isolation unless specified for certain sub functions. It is hard to find respondent to know all the functional area of Institutes / Universities. i.e. a person from

finance finds it difficult to answer questions from Human Resource and Management decision area and vice-versa. Hence it is decided to send questionnaire to people working in different courses of the same Institutes / Universities and later club responses functional area wise

VI. Data Collection Process

Pilot Survey

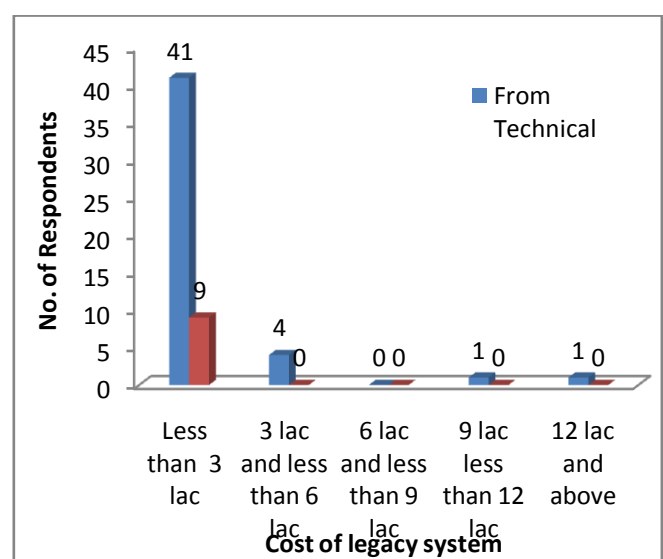
A pilot survey was executed before conducting the main survey. The purpose of this pilot survey is to examine whether or not the proposed questionnaire was well developed to analyze the benefits of EERP system. It is also examined how well the survey is designed for respondents to answer properly. Pilot survey is conducted for more than 10 Institutes which has provided vital inputs for

- Various functional areas to be included on which the questions are required to be based.
- Exclusion of less important areas

VII. Data Analysis

a) Cost with legacy system with existing ERP system

Cost of Regular System (Before Implementing ERP)	No. of Respondents From Technical	No. of Respondents from Health Science
Less than 3 lac	41 (87.23)	9 (100)
3 lac and less than 6 lac	4 (8.51)	0
6 lac and less than 9 lac	0	0
9 lac less than 12 lac	1 (2.31)	0
12 lac and above	1 (2.31)	0
Total	47	9



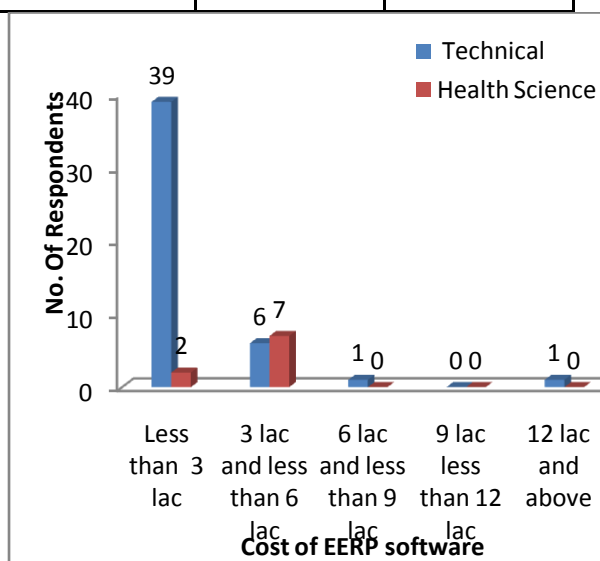
87.23 percent Technical institutes cost of legacy system is less than 3 lacs whereas 100 percent Health Science institutes cost of legacy system is less than 3 lacs.

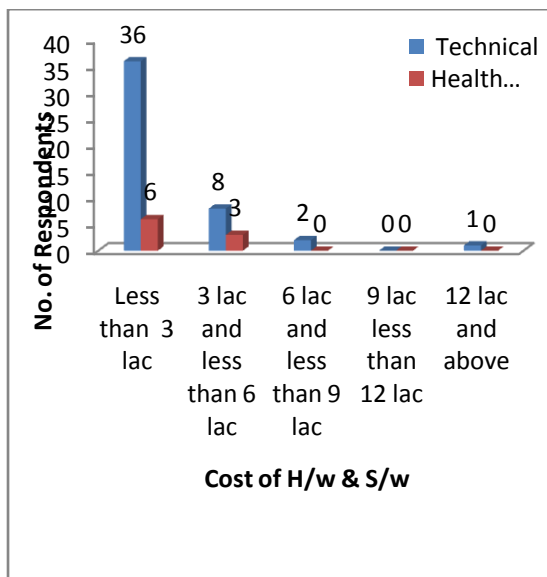
It is found that 82.98 percent of Technical Institutes implementing Educational ERP software system cost is less than 3 lacs and 77.78 percent of Health Science Institutes implementing Educational ERP system cost is in between 3 lacs and less than 6 lacs.

Cost of Educational ERP system	No. of Respondents From Technical	No. of Respondents from Health Science
Less than 3 lac	39 (82.98)	2 (22.22)
3 lac and less than 6 lac	6 (12.77)	7 (77.78)
6 lac and less than 9 lac	1 (2.13)	0
9 lac less than 12 lac	0	0
12 lac and above	1 (2.13)	0
Total	47	9

b) Cost of Hardware and software (Servers, desktop, storage, network, database, OS)

Cost of Hardware and Software	No. of Respondents From Technical	No. of Respondents from Health Science
Less than 3 lac	36 (76.60)	6 (66.67)
3 lac and less than 6 lac	8 (17.02)	3 (33.33)
6 lac and less than 9 lac	2 (4.26)	0
9 lac less than 12 lac	0	0
12 lac and above	1 (2.13)	0
Total	47	9



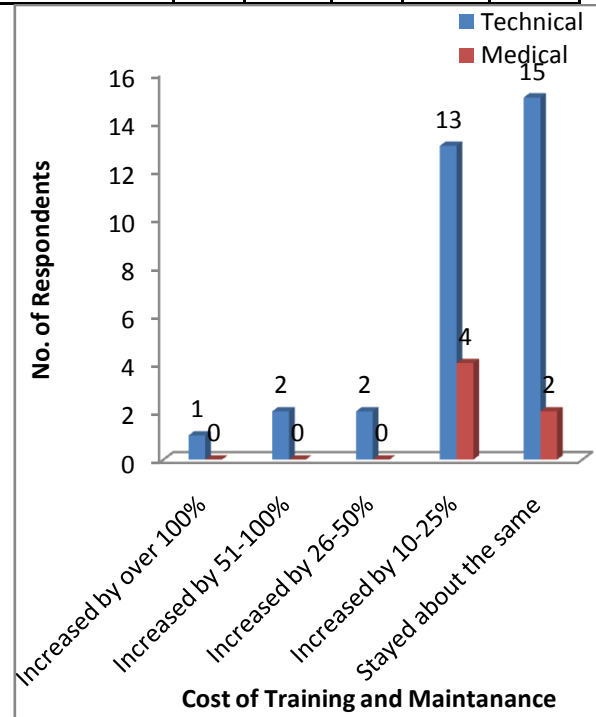


76.60 percent of Technical Institutes are agreed to the cost of Hardware and Software is less than 3 lacs whereas 66.67 percent Health Science Institutes agreed to the cost which is less than 3 lacs.

c) Cost of Training and Maintenance

Cost of Training and Maintenance	Course				Total
	Technical		Health Science		
	Yes	%	Yes	%	
Increased by over 100%	1	3.03	0	0	1
Increased by 51-100%	2	6.06	0	0	2
Increased by 26-50%	2	6.06	0	0	2
Increased by 10-25%	13	39.39	4	66.67	17

Stayed about the same	15	45.45	2	33.33	17
Total	33	100	6	100	39



It is observed that Cost of training and Maintenance after implementing Educational ERP system for Technical Institutes is 45.45 percent stayed about the same and 39.39 percent agreed to increase by 10-25 percent whereas for Health Science Institutes 33.33 percent stayed about the same and 66.67 percent said to have increase by 10-25 percent cost of training and maintenance.

d) Educational ERP cost related influencing factors

Sr. No.	EERP cost related statements (Agree or Disagree)	Avg Value
1	Educational ERP system is less costly to enhance / upgrade than the system(s) that were replaced	3.93
2	Educational ERP systems is less costly to integrate than the system(s) that were replaced	3.88
3	Educational ERP system is less costly to maintain and operate the system(s) that were replaced	3.75

Cost related factors which influence Institutes to implement educational ERP system which are agreed with highest average value 3.93 for "Educational ERP system is less costly to enhance / upgrade than the system(s) that were replaced", average value 3.88 for "Educational ERP systems is less costly to integrate than the system(s) that were replaced" and average value 3.75 "Educational ERP system is less costly to maintain and operate the system(s) that were replaced".

e) Comparison of cost with legacy system with existing ERP system

Cost of Legacy system

87.23 percent Technical institutes cost of legacy system is less than 3 lacs whereas 100 percent Health Science institutes cost of legacy system is less than 3 lacs.

Cost of Educational ERP Software

It is found that 82.98 percent of Technical Institutes implementing Educational ERP software system cost is less than 3 lacs and 77.78 percent of Health Science Institutes implementing Educational ERP system cost is in between 3 lacs and less than 6 lacs.

Cost of Hardware and software (Servers, desktop, storage, network, database, OS)

76.60 percent of Technical Institutes are agreed to the cost of Hardware and Software is less than 3 lacs whereas 66.67 percent Health Science Institutes agreed to the cost which is less than 3 lacs.

Cost of Training and Maintenance

It is observed that Cost of training and Maintenance after implementing Educational ERP system for Technical Institutes is 45.45 percent stayed about the same and 39.39 percent agreed to increase

by 10-25 percent whereas for Health Science Institutes 33.33 percent stayed about the same and 66.67 percent said to have increase by 10-25 percent cost of training and maintenance.

Cost Related Influencing Factors

Cost related factors which influence Institutes to implement educational ERP system are highest

Average value 3.93 for “Educational ERP system is less costly to enhance / upgrade than the system(s) that were replaced”,

Average value 3.88 for “Educational ERP systems are less costly to integrate than the system(s)

that were replaced”

Average value 3.75 “Educational ERP system is less costly to maintain and operate the system(s) that were replaced”.

VIII. Findings

The cost of implementing Educational ERP system in Technical and Institutes is more as compare to cost of legacy system before implementing Educational ERP system. The cost of influencing factors of educational ERP system board of director agreed to the statement is Educational ERP

system is less costly to enhance / upgrade than the system(s) that were replaced.

IX. Conclusion

The cost of implementing EERP is more as compared to legacy system. The Management, Staff and Learner say that Institute’s performance can be enhanced after implementation of EERP in terms of operations, effectiveness and efficiency, good decision making tools, thus increasing the overall productivity of the Institute. Advancement in science and technology, educational institutes encourage the use of new learning modes to achieve their goals.

X. References

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